

THE CONTRACT JOURNAL

INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

No. 4,231 82nd YEAR

THURSDAY, JULY 28, 1960

PRICE 2/-

Proved by EUCLID

*32,750 times



Many years ago, the first Euclid was delivered. A new era in the development of heavy earthmoving equipment had commenced.

Since then, Euclids have earned the reputation for robust, rugged reliability, that makes them to-day the accepted standard by which earthmovers are judged, the world over.

GEORGE WIMPEY & CO. LTD., are one of the world famous contractors who use Euclids. The illustration above shows the C-6 Crawler Tractor they have purchased, at work on one of their many important projects.

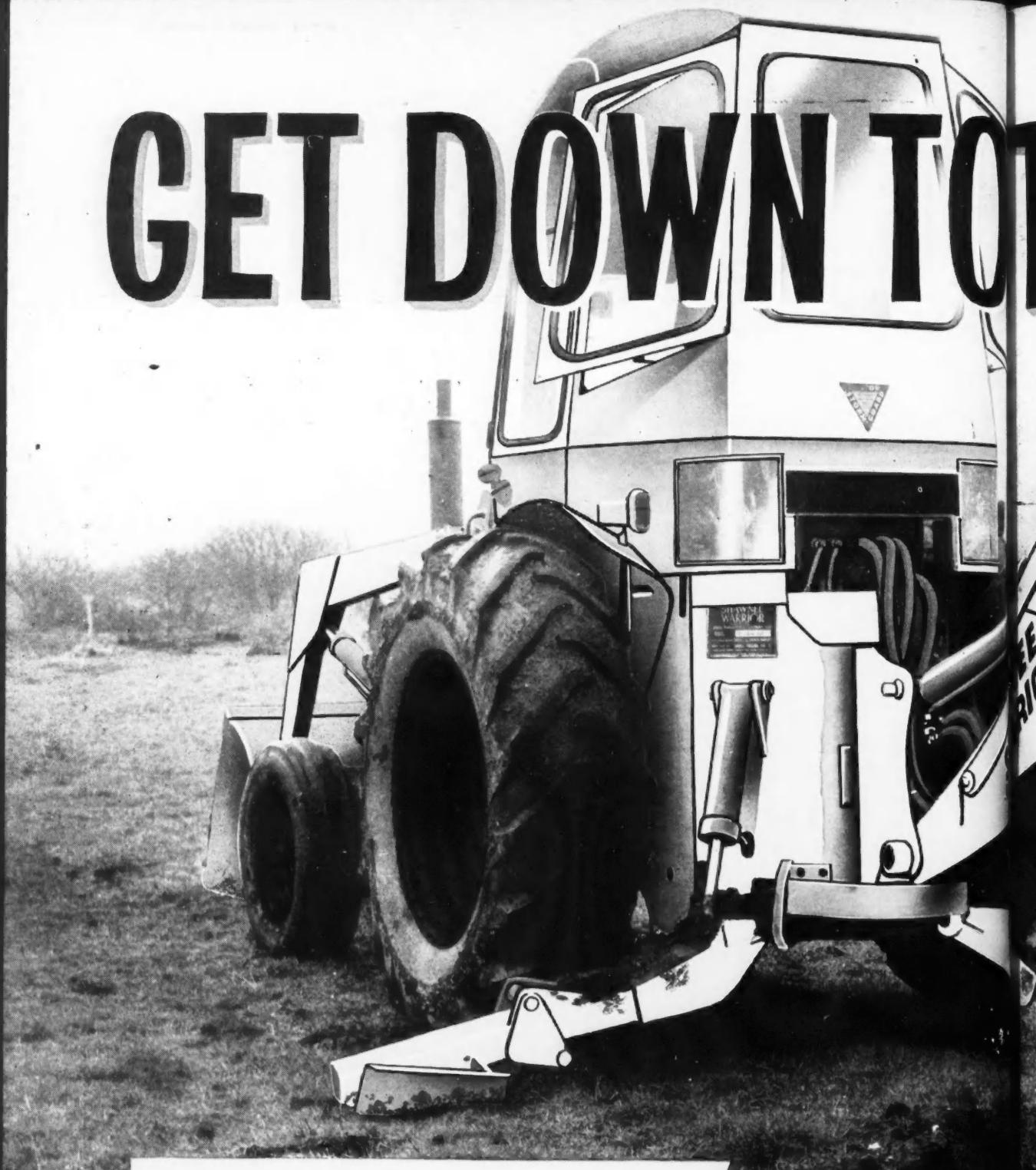


BLACKWOOD HODGE

* 32,750 Euclids have now
been delivered
to regular users

Subsidiary Companies Branches Works and Agencies throughout the World

GET DOWN TO



WITH THE
Shawnee
“WARRIOR” DIGGER

THE JOB quicker



The Shawnee "Warrior" Digger gives you *real powerful, deep digging action to a depth of 11 ft. 3 ins . . . 180° angle digging . . . high loading to 8 ft. 10½ ins . . . and a long 17 ft. reach.* Contractors will welcome this versatile, speedy, easy to operate, more economical machine—a machine with the highest power-to-weight ratio built today. Contact us NOW for fuller details of the Shawnee "Warrior" Digger—the Digger that is available for all leading makes of standard Tractors.

MOORE'S

Now official

**N. & E. LONDON Distributors for
FRED MYERS LTD.**

of

JOHN DEERE/LANZ

(OVER 40 YEARS OF QUALITY TRACTOR MANUFACTURE.)

440 CRAWLER

NOW INCLUDES THE TIME-SAVING NEW DIRECTION REVERSER.



- $\frac{7}{8}$ ' CU. YD. BUCKET.
- 10' DUMP HEIGHT.
- 5 ROLLER TRACK FRAME ASSEMBLY.
- LOW FUEL COSTS.
- QUALITY CONSTRUCTED.

MOORE'S PLANT LTD

105-129 MARKFIELD ROAD, TOTTENHAM, LONDON, N.15. Grams 'MORPLANLIM,' SOUTHTOT, LONDON.

MOORE'S PLANT INVITE YOU

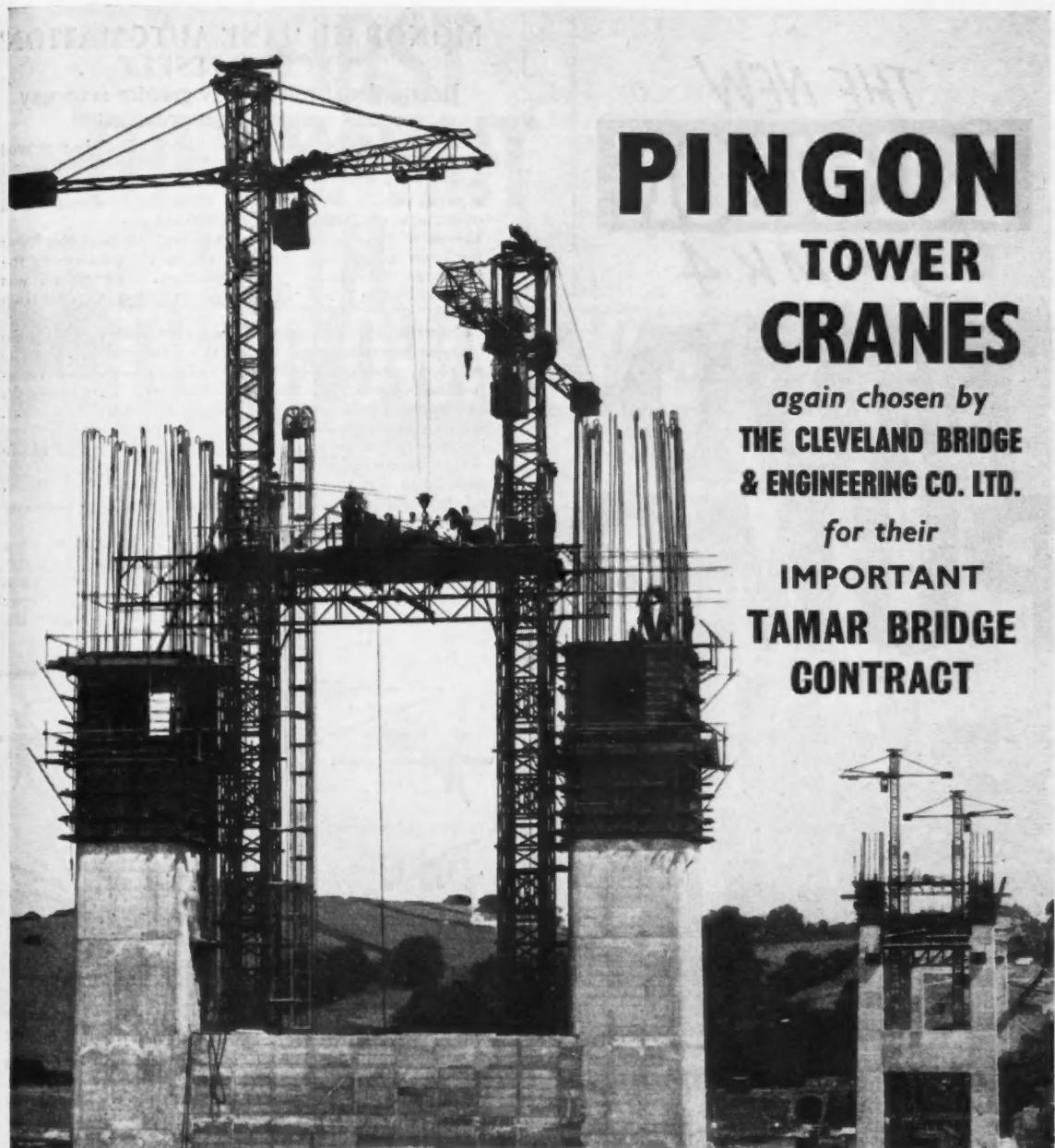
to enquire for illustrated leaflets, price lists, and free demonstration.
831 Loader and 831A Scarifier, 51 Backhoe Trencher, two lever control and five positions. 602 Bulldozer and 24 Scarifier, 300 Side Boom, Log Loader, etc.
After Sales Service and Spares—

Tel: TOTTENHAM 0401 (10 Lines)

1960

0.





PINGON TOWER CRANES

again chosen by
**THE CLEVELAND BRIDGE
& ENGINEERING CO. LTD.**

for their
**IMPORTANT
TAMAR BRIDGE
CONTRACT**

We shall be pleased to advise you on the most suitable
Crane for your particular requirements.

SOLE SELLING AGENTS IN THE UNITED KINGDOM

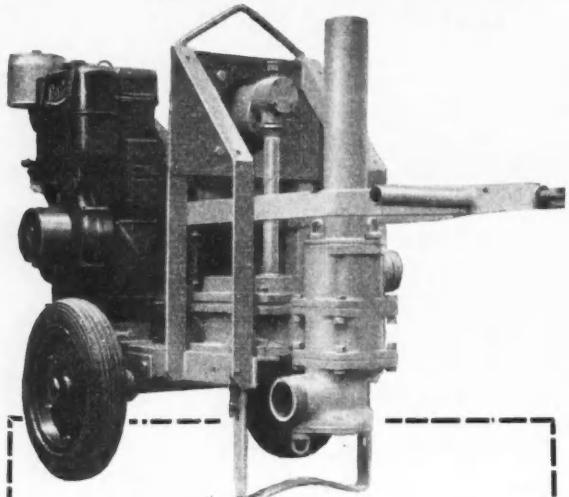
GEORGE COHEN
SONS AND COMPANY LIMITED
WOOD LANE, LONDON, W.12

Tel: Shepherds Bush 2070

And at: Stanningley (near Leeds), Kingsbury (near Tamworth), Manchester,
Glasgow, Swansea, Newcastle, Belfast, Sheffield, Southampton, Bath.



THE NEW
JOHNSON
 3" - MK 4
**MUD
PUMP**



Maintaining our policy of continued improvement and real value for money we now present the JOHNSON 3 inch Mk. 4 Mud Pump

- Improved efficiency—with greater mobility.
- More compact—easier to move over bad ground.
- Ideal in confined spaces—direction of elbows can be adjusted to suit site conditions.
- Better balance for towing—no dangerous projections.
- A new 'high' in heads and capacity—27 ft. suction—3,600 g.p.h.
- Easy clean ball valves—no clacks—no foot valve.
- Longer diaphragm life.

Write or 'phone for a demonstration on your site.

JOHNSON **QUALITY PAYS**

C. H. JOHNSON (Machinery) LIMITED, STOCKPORT, CHESHIRE
 ENGLAND

Telephone: STOckport 2642/5. Telex 66-297. Telegrams: 'Machinery' Stockport
 FOR DUMPERS, MUD PUMPS, CENTRIFUGAL PUMPS, POWER RAMMERS,
 POKER VIBRATORS, SCREED VIBRATORS, FIXED AND MOBILE CONVEYORS
 London Sales and Service Depot: 38-44 Lower Richmond Road, S.W.14.
 Tel.: PROspect 7671

Scottish Sales and Service Depot: 119 Whitefield Road, Govan, Glasgow, S.W.1.
 Tel.: Govan 2701

MONORAIL 'LINE AUTOMATION' EXCELS ITSELF

International reports say greater economy and output targets reached

Over the years Monorail 'Line Automation' has proved itself to be the most ingenious and the most productive and economic method of moving materials. This is a fact which is more than substantiated by reports available from all over the world. Here are some extracts:

Vancouver Monorail 'Line Automation' has won the "Star Performance" Award for most efficiently performing the functions for which it was designed. The award was granted by the Western Canadian magazine "Construction World".

Germany Monorail is constantly winning fresh acclaim in the German national press, including such remarks as: "The simplest, most economical and rational method of transporting concrete", and in another paper: "...only thanks to Monorail could work continue under these conditions. Under conditions such as these it would be true to say that if the Monorail had not been invented, someone would have had to invent it here."

Most large German contractors now use British-built Monorail for their placing of concrete, and the sales in Germany are soaring.

Rhodesia Monorail 'Line Automation' helped to make a record pour of 2,292 cu. yds. of concrete in 124 hours during the construction of a new reverberatory furnace at a copper mine. It was the largest continuous pour ever undertaken there. The average rate of pouring the concrete was 18.55 cu. yds. per hour.



MONORAIL needs no driver



MONORAIL crosses ditches, streams



MONORAIL cuts costs on small sites too

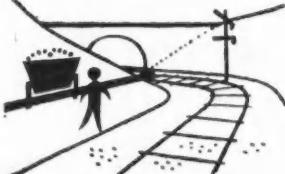


MONORAIL is so easy to install

Beirut Monorail 'Line Automation' proved its superiority on the shores of the Dead Sea, 1,300 ft. below sea level. During the initial flooding of the salt pans the bunds had to be repaired, but the trouble spots were inaccessible to wheeled vehicles. The easily placed Monorail across the ponds enabled the necessary repairs to be made quickly and efficiently.

Denmark The Danish Unskilled Workers' Journal, in an article on the Monorail, said: "...the system is absolutely the most economical over distances between 50 and 300 metres that has yet been invented."

Sweden Three Monorail units, riding side by side, were used for the concreting in the construction of the Stockholm Underground.

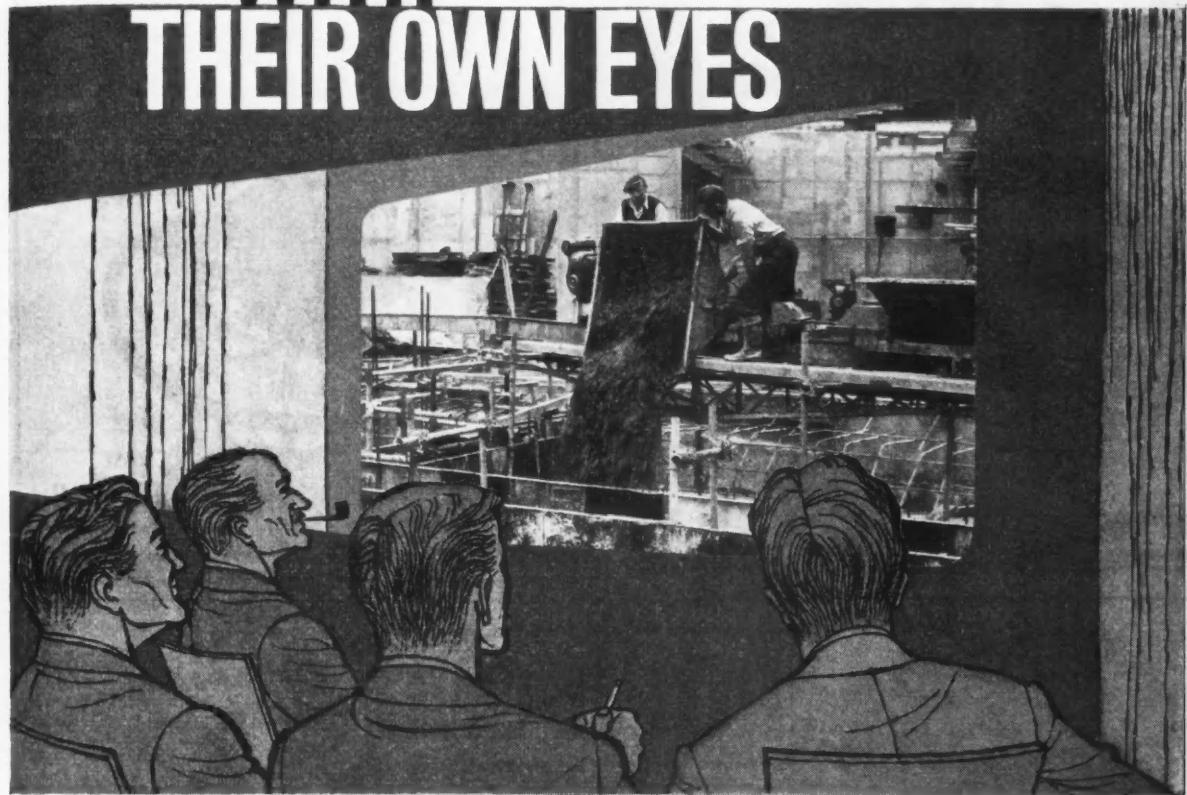


MONORAIL reaches where wheeled vehicles cannot

Rotterdam On the Rotterdam Power Station construction—the largest power station in Europe—692 cu. m. of concrete were poured in one 8-hour day, entirely with the Monorail. Four sets were used.

Brisbane A prominent Australian contractor says: "It is indispensable. The Monorail is now becoming a familiar sight on many construction jobs that involve the placement of large quantities of concrete and other material, delivering 22 cu. ft. of concrete every four minutes, even where the placement area is over 100 yds. from the mixer."

FIRST THEY SAW IT WITH THEIR OWN EYES



then they moved materials with
mono-rail 'LINE AUTOMATION' and slashed costs
 left, right and centre. So can you!

Monorail 'Line Automation' has brought a new level of economy and productivity to all jobs, big and small, all over the world. This fact has become so obvious that contractors everywhere are changing to Monorail 'Line Automation', achieving new economy and output targets — fast!

THIS IS A FACT.

No matter how good your present method of moving materials, Monorail 'Line Automation' is better.

PROVE IT FOR YOURSELF

To: Road Machines (Drayton) Ltd, West Drayton, Middlesex

Please let me know how Mono-rail 'Line Automation' will give me highest ever economy and output targets.

I should like to borrow the Mono-rail 'Line Automation' film free of charge. TICK OFF IF REQUIRED.

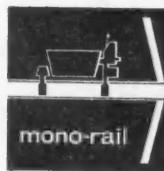
Name _____

Address _____

C1.17

ROAD MACHINES (DRAYTON) LTD.

West Drayton, Middlesex
 Telephone: West Drayton 3721



JSP 5849

WHITLOCK
DINKUM DIGGER
MAJOR

ESSEX
DISTRIBUTORS

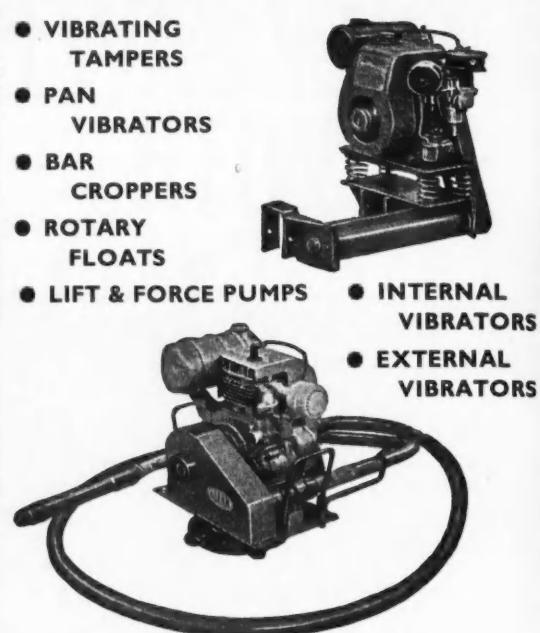
SYMES
 (PLANT SALES) LTD
 BRENTWOOD · ESSEX
Telephone BRENTWOOD 2116 (5 lines)



ALLAM

HIRE FROM THE MAKER

- VIBRATING TAMPERS
- PAN VIBRATORS
- BAR CROPPERS
- ROTARY FLOATS
- LIFT & FORCE PUMPS
- INTERNAL VIBRATORS
- EXTERNAL VIBRATORS



HIRE WITH OPTION TO PURCHASE
ALLAM MACHINERY HIRE LTD.
 132-135 SLOANE STREET, S.W.1 Telephone: SLOane 9976 (5 lines)
 SCOTLAND: 39 Cavendish Street, Glasgow, C.5 Telephone: South 0186



POLYBOND

Architects
SPECIFY
 Builders &
 Contractors
RECOMMEND
 Hospitals &
 Public Authorities
APPROVE

YOU Can Be SURE

*There is
 nothing else
 so efficient as*

POLYBOND



**The Universal
 Building adhesive &
 sealer for all
 Materials!**

*new cement and
 plaster renders
 applied with no
 hacking and no
 difficulty*

For the name of your nearest stockist write or telephone the manufacturers:- POLYBOND LTD. SOUTHAMPTON. Telephone Locks Heath 3372

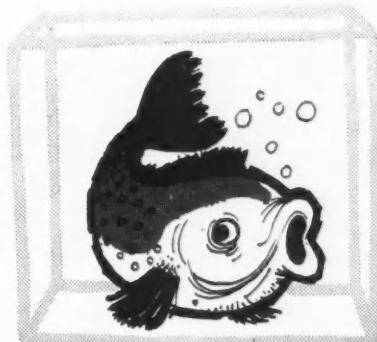
INDUSTRIAL PLANT

of all kinds . . .

Of course, it depends what you mean. Our Industrial Plant Department has supplied Industry for over seventy years and has the latest equipment, as well as reconditioned plant, available at all times. If you want Boilers, Tanks (including Braithwaite sectional steel tanks), Jacketed Pans, Chemical Plant, Steel and Aluminium Alloy Scaffolding, Autoclaves, Air Receivers, Pipes and Tubing, Valves and Fittings, Boiler House accessories, etc., then Wards are the people to try first.



boilers



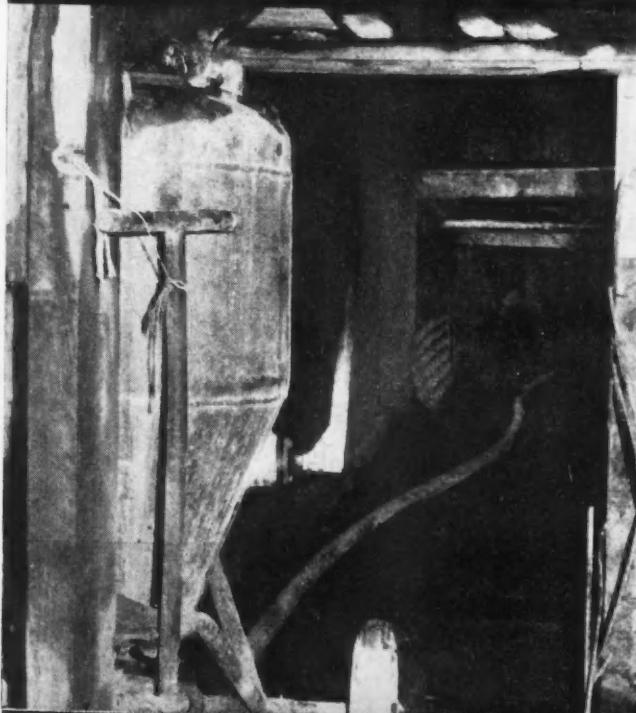
tanks



coolers

THOS. W. WARD LTD

INDUSTRIAL PLANT DEPT · ALBION WORKS · SHEFFIELD · TEL 26311 (22 lines)
LONDON OFFICE: BRETTENHAM HOUSE · LANCASTER PLACE · STRAND · W.C.2 · PHONE: TEM.1515



(Top) Tunnel lining.
note the flexibility of
the Lancy piping

(Left) The Lancy
working in a confined
tunnel space

(Right) Dam building.
The reinforced
concrete arches were
sprayed to 8" thick-
nesses

(Left of righthandpage)
Houses being sprayed
with concrete

(Right) High ba
being Lancy spr
to prevent landsl



Sole

MA

42 P

CONCRETE TRANSPORTING AND SPRAYING BY THE BRITISH BUILT 'LANCY'

The modern, fast, labour saving method of dam building—lining tunnels, canal banks and reservoirs—constructing arches, walls etc.

LANCY pneumatic units transport and spray small aggregate concrete, cement and mortar over large areas, either horizontally or vertically. Depths of concrete ranging from a thin covering up to many inches can be sprayed at fast speeds. For tunnel lining, where space is restricted or where the lining itself is very thin; for strengthening the sides of mines and excavations; for the reinforced concrete construction of dams and storage tanks "Lancy" saves labour and money. The Lancy will also transport damp sand and cement from a central storing point to an outlying mixing bay.

Now made in this country, all components are to British dimensions. Supplied ex-stock.

LANCY APPLICATIONS INCLUDE:

The spraying of 10,594 cu. ft. of concrete to surface a semi-underground reservoir—Fixing the surface of 116 ft. high banks on a mountain road to prevent landslides in the cutting. The angle of surface ranged from 60° to the vertical and the total surface area sprayed was 291,900 sq. yards using 105,944 cu. ft. of concrete. Spraying of a 6" surface on to the banks of a 16,400 ft. canal to bind the soil and prevent erosion—Concreting the arches of a multiple-arch dam by spraying concrete on to shuttering—Lining road tunnels—Spraying of vertical walls.



Sole Distributors in Great Britain

MACHINERY (CONTINENTAL) LIMITED

42 Park Street, London, W.I. Phone Hyde Park 1401/2/3/4



In 4 sizes giving widths from 1 ft. to 5 ft. 7 in. : SALE OR HIRE
ACROW (ENGINEERS) LTD., SOUTH WHARF, LONDON, W.2 : AMB 3456

**It's quicker
and safer with
ACROW
TRENCH
STRUTS**

BY "HERCULES"!
(REGD. TRADE MARK)



**NEEDS NO CLIPS,
CLAMPS, WIRES
nor
SPECIAL TOOLS**

The "HERCULES" range includes Hose Repairers, Screw Couplings, Adaptors, etc., for pneumatic, oxy-acetylene and all industrial Hose, and a stronger Lug-type Coupling for suction and delivery hose.

HERCULES
SIMPLY HAMMER IT
Tel: 01-5480 1440 1441

**A REMARKABLE
HOSE FITTING**

Firms and Organisations like Shell, I.C.I., British Railways, The National Coal Board, etc., find this the perfect Fitting for mending and joining rubber hose of all diameters. You simply fit hose ends over the nozzles and hammer the Claw-Grips home. A "HERCULES" Repairer—and a hammer—is a complete Hose mending outfit, and is only one in the low-cost, efficiency range of "HERCULES" Fittings. Have us send you full details and prices.

WON'T LET HOSE SLIP

NEWTON SALES COMPANY LTD

517-521 Fulham Road, London, S.W.6. Tel: FULham 4228
THE SPECIALISTS IN HOSE FITTINGS

CONTRACTORS PLANT NEW OR SECONDHAND SELECTED MACHINES INCLUDE

One 2-tool Mobile Air Compressor, comprising Air Pumps Model 155 PD.4 2-tool Diesel Compressor, mounted on 3-ton Ford Diesel Chassis. Each unit powered by Ford 4D Diesel Engine. Complete with Tool Chest. Compressor new March, 1960. Vehicle chassis new 1956. Excellent £1,450

One WINGET 10HTH 14/10 cu. ft. Diesel-driven Hydraulic Tilting Mixer. Complete with Weighbatcher. Excellent condition throughout. Bargain £375

One 14/10 cu. ft. WINGET Model 10NT Closed Drum Diesel-driven Concrete Mixer, powered by Lister Diesel Engine, fitted with Dragline Feeder. Machine in very good condition throughout. Bargain £385

One JONES "SUPER 20" Diesel-driven Mobile Crane, on pneumatics and fitted 25ft. Lattice Jib, powered by Fowler Diesel Engine. Old but in good condition and with good tyres £250

One TAYLOR "JUMBO" 2½-ton Diesel Mobile Crane, powered by Perkins Diesel Engine. Complete with 1yd. Hydraulic Grab, Forklift Attachment, and Loading Shovel. Overhauled, cleaned and repainted £875

One JONES KL.33 Mobile Crane, mounted on pneumatic tyres, powered by Diesel Engine and fitted with 40ft. Straight Lattice Jib, new 1956. £1,850

One 3½ cu. yd. CHASESIDE Diesel-driven DUMPER, new late 1956, Fordson Diesel Engine, fitted Cab. Generally overhauled in our works; repainted. Good condition £675

One 1 cu. yd. SMITH B Diesel-driven Excavator, powered by Perkins P.3 Diesel Engine, fitted with Dragline Equipment. New 1953. One owner. Extensive overhaul in works. Excellent condition. Bargain £675

One ALLIS-CHALMERS HD.7 Diesel-driven Tractor, fitted Hydraulic Angle-dozing Equipment, Gar Wood Winch. Very reasonable condition £600

One RUSTON 19RB 5¾ cu. yd. Diesel-driven EXCAVATOR, fitted Backacter Equipment, 12800 Series, Ruston 4VROHN Diesel Engine and in good condition £1,950

One A.C.E. "COMET" 7½cwt. Diesel-driven Mobile Hoist, new 1957, powered by Petter AVA1 Diesel Engine and in good working order £225

One PARKER 24in. x 15in. Crusher, Type MS, powered by Ruston 6-cyl. Diesel Engine and mounted on mobile chassis. Complete with Feed Chute, Donkey Engine with friction clutch start. Excellent condition £2,750

One CHASESIDE 700 Diesel-driven Loading Shovel, new 1956, Fordson Diesel Engine, Crowd Shovel and Lighting Equipment, tyres new 90 per cent. new. Excellent condition £1,100

One SMEDLEY 9ft. dia. Roller Pan Mixer, powered by 440-V 15-h.p. 3-phase electric motor, under-drive, trap door side-discharge. New 1956. Worked only 18 months. Fitted new roller and shaft. Excellent condition and with motor almost new. Cost £2,250 £1,900

One "BRISTOL" 25" Diesel-driven Tractor, fitted Hydraulic Angle-dozing Equipment, new 1956. Perkins P.3 Diesel Engine, tracks and engine overhauled. Machine in excellent condition. Bargain £600

One INTERNATIONAL DROTT Skid Tractor, fitted with 4-in-1 Bucket, new December, 1957. new gearbox and tracks recently fitted, and engine resleeved. General condition very good £1,925

AIDU EQUIPMENT COMPANY LIMITED
105-129 MARKFIELD ROAD · TOTTENHAM · LONDON · N.15
Telephone · TOTtenham 0401 (10 lines)

July 28 1960

THE CONTRACT JOURNAL

SUPPLEMENT

This BIG NEW BRITISH BUILT DROTT

**FOR GREATER PRY-OUT
force and big production**



**The NEW
B.20-K3
(3 cu.yd.bucket)**

4 in 1 bucket also available



**INTERNATIONAL
DROTT**

**BRITISH BUILT big powerful model
of this world famous—best selling
dozer skid shovel**

SAVILLE

(TRACTORS) LIMITED

A Company of the LUMLEY-SAVILLE Organisation.

STRATFORD-ON-AVON

Telephone: 4242 (15 lines)
Telex. Birmingham 31633

LONDON

Tel: ASHFORD (Middx.) 4191 (10 lines)
Telex. London 24117

CARDIFF

Tel: CARDIFF 33572/3
Telex. Cardiff 49250

BELFAST Telephone: DUNMURRY 2511 (4 lines)

IRELAND: Sole Distributors for INTERNATIONAL HARVESTER, J. H. SAVILLE & CO. LTD. Tel: DUBLIN 373606 (5 lines)



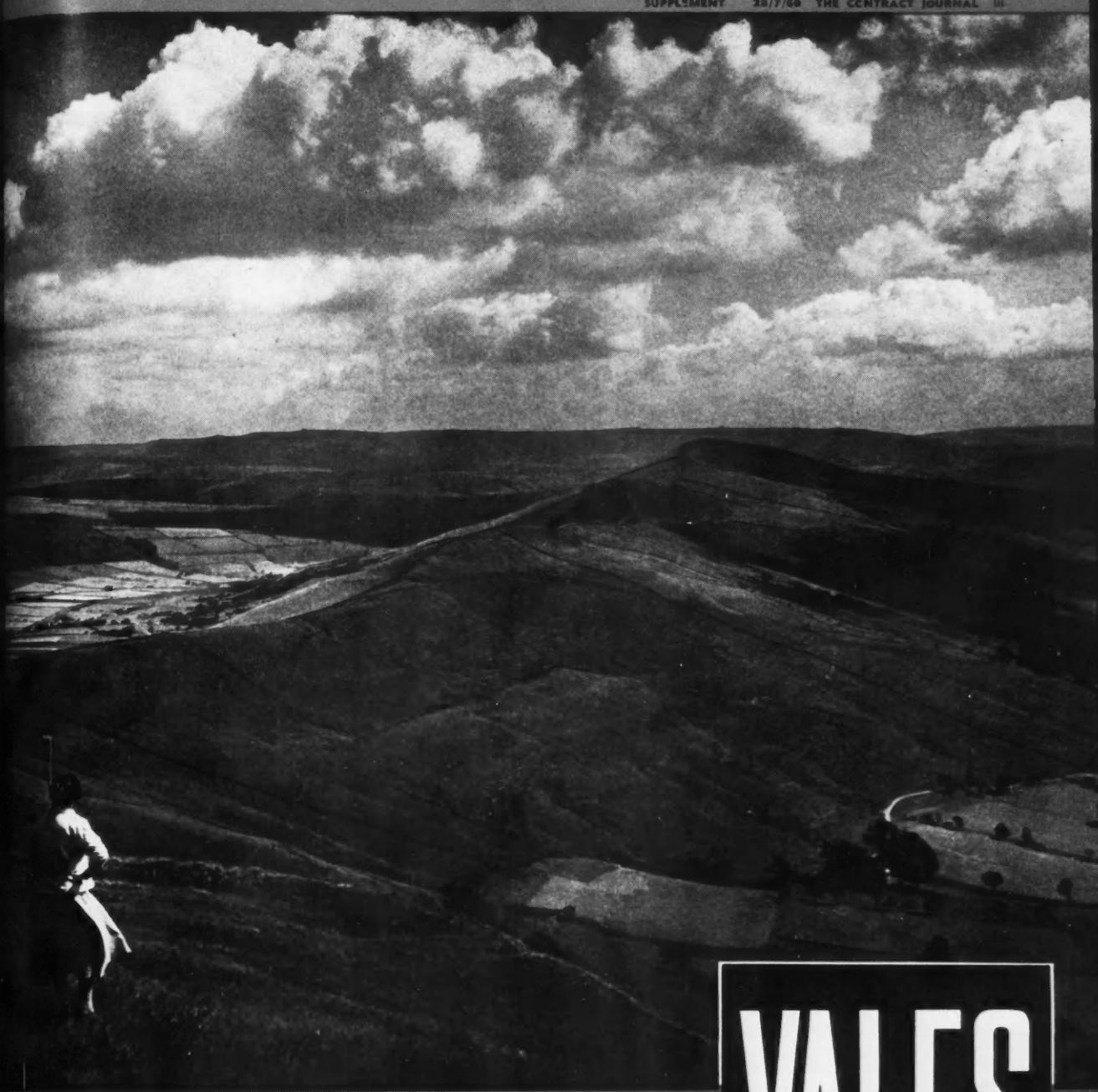


Any moment now...

It pays to keep a watchful eye on crawlers and other plant machinery. A little dust can cost a lot of money; avoid lubrication contamination by dirt and blow-by products by a regular oil and air-filtering maintenance. The VIGZOL INDUSTRIAL LUBRICATION SERVICE offers plant operators the most up-to-date and comprehensive range of lubricants. Vigzol lubrication specialists will prepare a complete lubrication schedule for your plant, reducing grades to a minimum making simplicity the keynote to efficient operation.



Write for booklet "Industrial Lubrication" Save time, money and worry by consulting
THE VIGZOL OIL CO. LTD. · VIGZOL HOUSE · GREENWICH · LONDON S.E.10

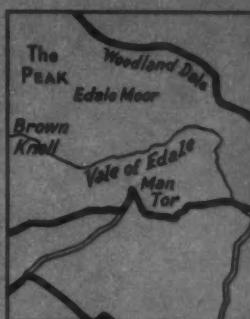


Vales of England

The Vale of Edale, Derbyshire

A broad and smiling vale through which the little River Noe wanders, gathering on its way countless mountain streams. Mighty hills surround it . . . the Kinder Range with Groundslow Knoll and Ringing Rover, Brown Knoll and Man Tor and Lose Hill . . . names to remember with longing and affection by all who have visited this lovely Vale.

But when you are thinking of **PLANT HIRE**
... the 'Vale' to remember is



**VALES
PLANT
HIRE ...
any plant
... anywhere**

VALES PLANT REGISTER LTD

14 LOWER GROSVENOR PLACE, VICTORIA, LONDON, S.W.1

VICTORIA 3501, 7531, 8080, 9886 (15 lines)

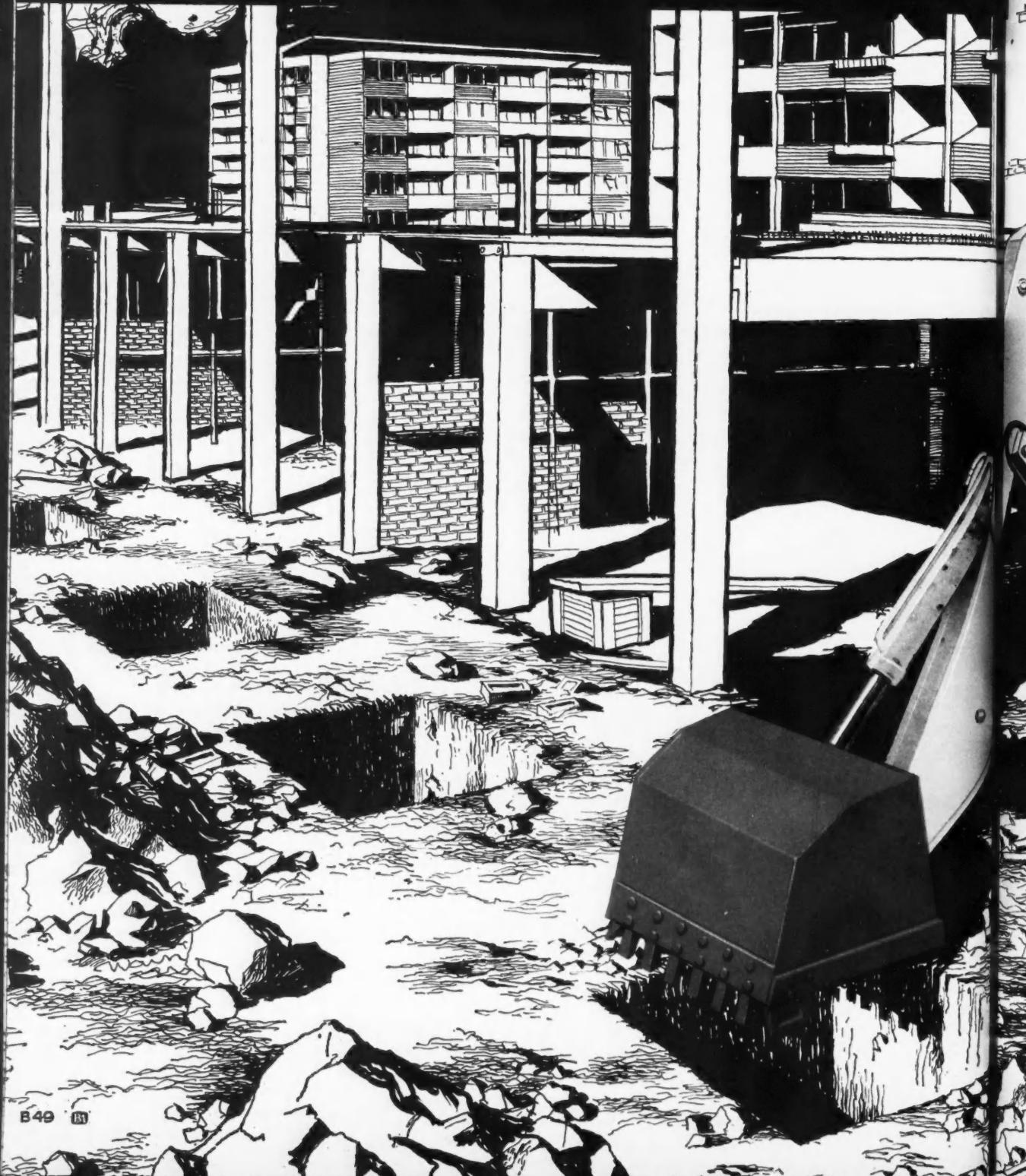
WATFORD WORKS: COW LAKE, GARSTON, WATFORD

GARSTON 3266/7/8

SPECIALISTS IN PLANT HIRE FOR NEARLY 40 YEARS

SQUARE HOLES

with the





**SQUARE HOLES 15 FT. DEEP
WITH ANY BUCKET**



Rocester, Staffs 432

THE WORLD'S FINEST RANGE OF CONTRACTORS' PLANT HIRE PURCHASE TERMS AVAILABLE

The Eclipse 15 cwt. Dumper from £366

The Dynamix has AUTOMATIC LUBRICATION from £87·10

FAST TOWING MODEL AVAILABLE

ROB ROY
CONTRACTORS' PLANT

MADE BY
JAMES F. LOW & CO. LTD. MONIFIETH · DUNDEE · SCOTLAND · Phone Monifieth 1.

24 Portable Saw Bench from £186·10

3 Lift and Force Diaphragm Pump from £168

5½ Fast Towing Mixer from £180

'ROB ROY' DEPOTS
THROUGHOUT THE
UNITED KINGDOM

GATESHEAD
LEEDS
BIRMINGHAM
CHESTERFIELD

TELEPHONE:
Low Fell 76747
Leeds 32861
Sheldon 4491
Chesterfield 4152

MANCHESTER
HASLEMERE
SOUTH WALES
BELFAST

TELEPHONE:
Moss Side 3090
Haslemere 2294
Coleford 2271
Belfast 46551

EDINBURGH
GLASGOW
ABERDEEN
LONDON

TELEPHONE:
Waverley 4204
Govan 2611
Aberdeen 43332
Waltham Cross 26211

July 28 1960

THE CONTRACT JOURNAL

SUPPLEMENT

vii

"Gyracflex"

PURPOSE-MADE

earth moving machine wire ropes

MARTIN-BLACK

have now designed a "Gyracflex" Purpose-made Machine Wire Rope specially for Earth Moving Machines, in both Filler and Seale construction. This development follows the success of their "Gyracflex" Purpose-made Mining Machine Wire Ropes.



**THESE ARE THE
FACTS**

**WHICH ENABLE YOU TO PRODUCE
THE FIGURES**

1. "DOWN TIME" LOSSES CUT
2. MORE EFFICIENT WORKING
3. FEWER BROKEN ROPES
4. INCREASED PRODUCTION

SEND TODAY FOR THE MARTIN-BLACK LEAFLETS "GIVE YOUR ROPES A CHANCE".

STOCKS
AND SPLICING
FACILITIES
AT
LONDON,
LIVERPOOL,
NOTTINGHAM.

GYRACFLEX" ROPES ARE NOT SUITABLE FOR
CRANES OR ELEVATORS

MARTIN, BLACK & CO. (WIRE ROPES) LTD.
SPEEDWELL WORKS, COATBRIDGE, GLASGOW

Telephone : COATBRIDGE 567 (Private Exchange)

LONDON: "NUMBER TWENTYFIVE," CURTAIN ROAD, E.C.2.

LIVERPOOL: 31 N. JOHN STREET, 2

NOTTINGHAM: 640 WOODBOROUGH ROAD, MAPPERLEY

NEWCASTLE-ON-TYNE: 12 SANDHILL, QUAYSIDE

CARDIFF: THE EXCHANGE, MOUNT STUART SQUARE

ALSO : MARTIN BLACK WIRE ROPES (CANADA) LTD., 2082 ALBERT STREET, MONTREAL

and 285 BERING AVENUE, TORONTO, 18

Telephone : BISHOPSGATE 6667/8/9

Telephone : CENTRAL 0924 (2 lines)

Telephone : NOTTINGHAM 64397

Telephone : NEWCASTLE 2-1282

Telephone : CARDIFF 32162

SIDE DISCHARGE



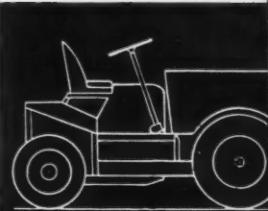
BUILT BY TH

GARGE dumper

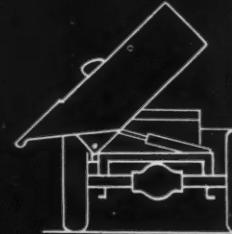
This completely new side discharge-dumper provides hydraulically operated finger tip controlled side discharge of concrete—1'-3" above ground level whilst travelling under load

SPECIFICATION

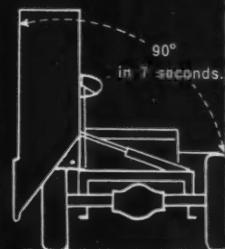
Chassis.	6" x 3" and 4" x 2" Channel, electrically welded giving ample strength and rigidity.
Skip.	3/16" thick sheet steel, electrically welded and braced where required. Capacity: 27 cu. ft. water level. Speed of lift: 7 seconds. Loading height: 4 ft. Maximum payload: 30 cwt.s.
Turning Radius.	9 ft. 6 ins.
Engine.	Petter AVA2. 11.5 h.p. @ 1650 r.p.m. working off half speed shaft. Chain drive to clutch, slow running "Renold" $\frac{3}{8}$ " pitch.
Gearbox.	Constant mesh, 3 forward, 1 reverse, gears hardened nickel chrome steel with a ground finish to ensure smoothness in running. 4 star differential with half shafts of 100 ton steel.
Driving Axle.	12" x 2½" brakes. 1st gear: 4 m.p.h. 2nd gear: 7½ m.p.h. top gear: 12½ m.p.h. reverse: 4 m.p.h.
Speeds:	4½ g.p.m. @ 1,500 r.p.m. Chain drive.
Pump.	Manually operated with relief unloader valve set at 1,500 p.s.i.
Control Valve.	23" stroke-2½" bore with nickel chrome ram, tested 2,500 p.s.i.
Ram.	Adequate in strength with a single wire braid, tested 2,500 p.s.i.
Hoses.	



Low loading height of 48 in., with 27 cu. ft. water level skip ensures use on site with standard mixers.



Positive hydraulic finger-tip control ensured by double-action ram driven from Dowty hydraulic motor directly coupled to engine.



Discharge lip within view of driver at all times ensuring accurate placing of concrete whilst in motion, complete tip of 90° obtainable if required within 7 seconds.

£720 del.

thwaites

THWAITES ENGINEERING CO. LTD.
CUBBINGTON • LEAMINGTON SPA
TEL: LEAMINGTON 3089



Photograph from "Introducing Animals" published by Spring Books, London

I'LL BUY IT...

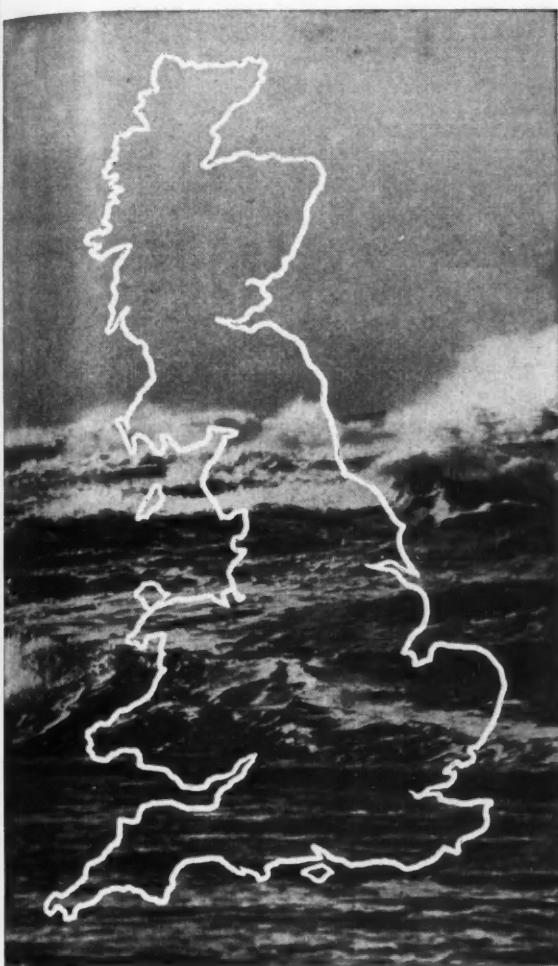
No, we haven't been trying to sell our gloomy friend a line in Dunlop hose. It's just that, looking at him, we thought how much tougher was our product. At least, going by reports from industry, our hose stands up to anything — water, oils, steam, chemicals — for year after year. Just the thing for speeding up production and bringing in new business! Well worth writing to Dunlop to find out more about it.

DUNLOP HOSE

DUNLOP MAKE HOSE BETTER TO LAST LONGER

DEPT. B.G.2, DUNLOP RUBBER CO. LTD. (HOSE DIVISION), EARLSWAY, TEAM VALLEY, GATESHEAD 11

CPH/DH/14



The Tide of progress:

**Extramyte pipes
are sweeping Britain!**

It is little more than three years since John Ellis and Sons Ltd. announced Ellispun Extramyte Pipes. Now they are sweeping the country. Every month more and more of them are specified. Because of their great strength (they have been tested up to 10 times British Standard loadings without failure) Extramyte pipes do not require site concrete. This means they can be laid more efficiently, more quickly with the minimum of supervision from the Resident Engineer or Clerk of Works which results in considerable saving in time and labour.

Ellispun
Extramyte
CONCRETE SEWER PIPES

SOLE AGENTS: JAMES SMITH BROTHERS 24 HALF MOON LANE
LONDON, S.E.24. PHONE: BRIXTON 3000 AND 3003
MADE BY JOHN ELLIS & SONS LTD. 21 NEW WALK, LEICESTER.
PHONE: LEICESTER 56682 (7 LINES)

WHICH
DIGGER
HAS
INDEPENDENT
AND
TELESCOPIC
HYDRAULIC
STABILISERS

?

THE WHITLOCK DINKUM MAJOR

WHITLOCK BROS. LIMITED, GREAT YELDHAM, ESSEX. Telephone: 346



Two "BROOMWADE" Type WR120 Portable Rotary Air Compressors operating "BROOMWADE" Type RB770B Pneumatic Breakers at Cheapside, London. Photograph by courtesy of Messrs. Howard Farrow Ltd.

No hold-ups with "BROOMWADE"

Within sight of Bow Bells, before the streets are choked with traffic, Messrs. Howard Farrow Ltd., get down to work with "BROOMWADE" Portable Rotary Compressors and Pneumatic Breakers. In common with many other leading contractors, Howard Farrow utilise the mobility of "BROOMWADE" equipment to work at off-peak traffic periods. During rush hours it can be quickly turned to other sites and brought back again when the traffic rush dies down—thus "BROOMWADE" equipment gives maximum service.

"BROOMWADE" manufacture a wide range of air compressors and pneumatic tools covering the requirements of civil engineers and contractors.

May we send you full details?

"BROOMWADE"
AIR COMPRESSORS & PNEUMATIC TOOLS
YOUR BEST INVESTMENT

BROOM & WADE LTD., P.O. BOX No. 7, HIGH WYCOMBE, BUCKS.
Telephone: High Wycombe 1630 (10 lines) Telex: 83-127

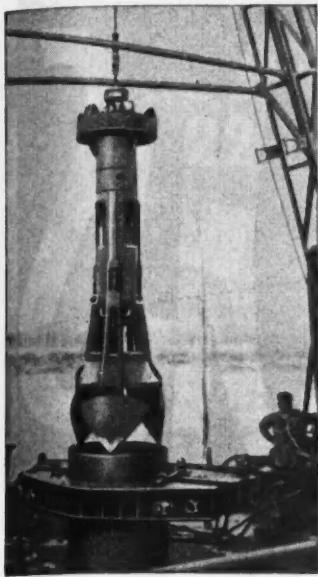
July 28 1960

THE CONTRACT JOURNAL

SUPPLEMENT

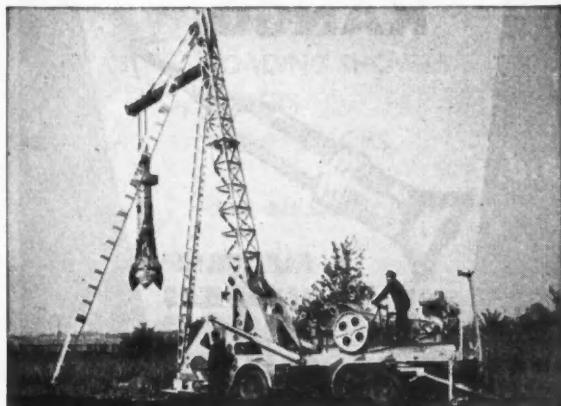
379

FOR BETTER RESULTS AND EFFICIENCY



USE
BADE
Single
Rope
Hammer
Grabs

Model	Cutting dia. of crown	Max. Boring dia. approx.	Number of blades	Dia. of guide ring	Weight		Min. dia. of tubes	
					of Grabs approx.	Hooking crown	O.D. inch	I.D. inch
E-32-2	14 $\frac{1}{2}$ "	17 $\frac{1}{2}$ "	3	-	1720 lbs.	187 lbs.	16 $\frac{1}{2}$ "	15 $\frac{1}{2}$ "
	16 $\frac{1}{2}$ "	20 $\frac{1}{2}$ "		-	1764 lbs.		18 $\frac{1}{2}$ "	17 $\frac{1}{2}$ "
	20 $\frac{1}{2}$ "	25 $\frac{1}{2}$ "		18 $\frac{1}{2}$ "	1841 lbs.		22 $\frac{1}{2}$ "	21 $\frac{1}{2}$ "
	24 $\frac{1}{2}$ "	29 $\frac{1}{2}$ "		21 $\frac{1}{2}$ "	1962 lbs.		26"	24 $\frac{1}{2}$ "
E-43-2	28 $\frac{1}{2}$ "	33 $\frac{1}{2}$ "	3	24 $\frac{1}{2}$ "	2866 lbs.	243 lbs.	30 $\frac{1}{2}$ "	29 $\frac{1}{2}$ "
	38 $\frac{1}{2}$ "	43 $\frac{1}{2}$ "		32 $\frac{1}{2}$ "	3307 lbs.		39 $\frac{1}{2}$ "	38 $\frac{1}{2}$ "
	47 $\frac{1}{2}$ "	59"		43 $\frac{1}{2}$ "	4410 lbs.		50"	48"



MODEL HVM BG 15

Hydraulic Tube Sinking and Extracting Machine incorporating E-32-2 Hammer Grab. Application: Bored Piles, Well Drilling.

Please ask for detailed information.

C.E.T. (EQUIPMENT) LIMITED

BURLINGTON WORKS, ABBEY ROAD, PARK ROYAL, LONDON, N.W.18
Tel : ELGAR 6777 (4 lines)

WHICH
DIGGER
IS MOST
VERSATILE AND
MANOEUVRABLE
AND HAS THE
GREATEST
TRACTION
?

THE WHITLOCK DINKUM MAJOR

WHITLOCK BROS. LIMITED, GREAT YELDHAM, ESSEX. Telephone: 305

COMPRESSORS FOR HIRE

- *Mobile*
- *Portable*
- *Stationary*
- *Diesel and Electric*
- *18 to 630 cu. ft. f.a.d.*

CONTACT US FOR SERVICE

CONTRACTORS SERVICES LTD

65 EFFRA ROAD, LONDON S.W.2

TELEPHONE BRIXTON 4081

also
KANGO



ELECTRIC
HAMMERS

July 28 1960

THE CONTRACT JOURNAL

SUPPLEMENT

381

**Tel.
RODNEY
2215**

HIRE PLANTS?

PLANT HIRE

EXCAVATORS
TRACTORS
TRAXCAVATORS
DUMPERS
LOADING SHOVELS
MIXERS
COMPRESSORS

and all Contractors' Plant

All enquiries to . . .

COX OF CAMBERWELL
H. COX & SONS (PLANT HIRE) LTD.
33 Southampton Way, Camberwell, London, S.E.3

The hire service
that never lets
you down

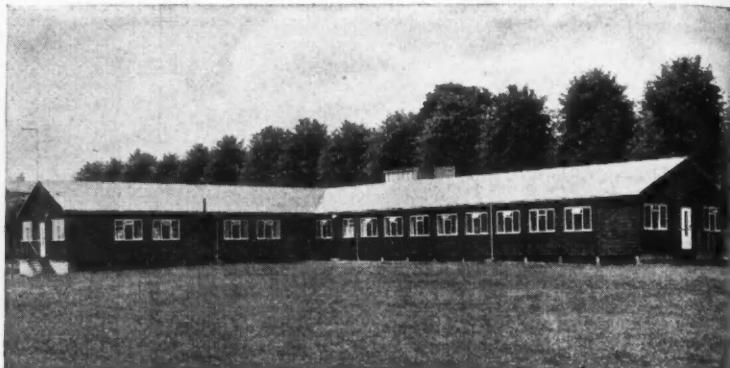
WHICH
DIGGER
OFFERS
SIMULTANEOUS
VALVE
CONTROL
AND
SMOOTH
SLEWING
?

THE WHITLOCK DINKUM MAJOR

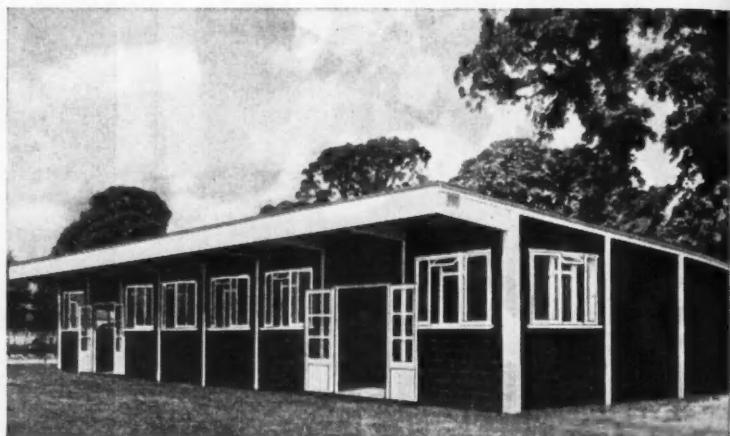
WHITLOCK BROS. LIMITED, GREAT YELDHAM, ESSEX. Telephone: 305

**SOME EXAMPLES OF
FINE TIMBER BUILDINGS**

Pavilions
Clubs
Schools
Libraries
Shops
Hospitals
Offices
Canteens
Showrooms
Estate Offices



OAKWOOD HOSPITAL, MAIDSTONE, KENT.
Bungalow Ward and Occupational Therapy Department.
Photograph by courtesy of the Regional Architect, S.E. Metropolitan Regional Hospital Board.



MEMBERS' PAVILION, GOODWOOD MOTOR RACING TRACK,
25ft. x 11ft. 6in. plus 5ft. canopy.
Photograph by courtesy of Empire (Catering) Co. Ltd. 46-48 James St., London, W.I.



SALES PAVILION, WORTH ESTATE, THREE BRIDGES, SUSSEX.
Photograph by courtesy of Cooper Estates Ltd.

Full details of these buildings, and all Thorns building systems, are shown in their New Catalogue which is unique, in that it gives at a glance, sizes, prices, plans and specifications. It is available, free, to bona fide enquirers.

J. THORN & SONS LTD. (DEPT. 73) BRAMPTON ROAD, BEXLEYHEATH, KENT.

Telephone : Bexleyheath 0021 (10 lines). Established 1896

**PRE-FABRICATED BY
THORNS**

"You get the
whole truth here..."



... says
SNODDY

*New Lead Wool
lightweight power
pump designed
specifically for
mains testing.*

It's the whole truth you *want* when it comes to mains testing. It's the whole truth you *get* with Lead Wool equipment. You can be sure of that because the Lead Wool range has itself stood the test of time—and proved itself outstanding for on-the-job dependability. Learn about test equipment by 'Lead Wool' and why it will tell the truth consistently.

Complete range includes hydraulic test pumps with hand or power drive—flanges and plugs—drain testers and stoppers.

the

LEAD WOOL CO. LTD

Snodland • Kent

Phone: Snodland 516-7

Telegrams: Strength-Phone Snodland

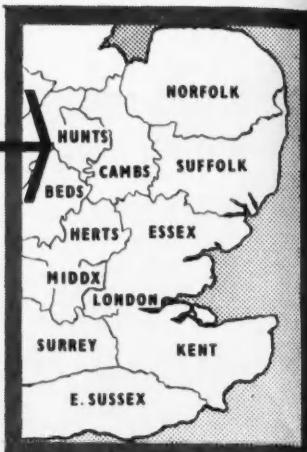
**WHICH
DIGGER
HAS
TROUBLE-FREE
HOSES
AND
FAN-COOLED
HYDRAULICS
?**

THE WHITLOCK DINKUM MAJOR

WHITLOCK BROS. LIMITED, GREAT YELDHAM, ESSEX. Telephone: 305

Do you live in this area?

Controlled from the two focal points of London and Ulting, Essex, we are the Sole Distributors of the JCB-4 in the following territory: London, Middlesex, Surrey, Essex, Hertfordshire, Bedfordshire, East Sussex, Kent, Cambridgeshire, Huntingdonshire, Suffolk and Norfolk. The JCB-4 Digger stands out head and shoulders above all others for performance, rugged construction and utmost reliability. We shall be very happy to demonstrate its capabilities anywhere in our territory at any time to suit you . . . fill in and return the coupon below . . . no obligation whatsoever.



Ernest Doe

HEAD OFFICE: Ulting, Maldon, Essex Tel: Hatfield Peverel 311 (Night 319)

London: Therapia Lane, Mitcham Road, Croydon

Tel: Thornton Heath 4844 (Day or Night)

and Sons Ltd

INDUSTRIAL DIVISION



**WHEN
WOULD YOU LIKE
A DEMONSTRATION?**

We would like you to demonstrate the JCB-4 Digger without obligation on our part.

Name _____

Address _____

Convenient date _____



CHASESIDE

A GREAT NAME
OVERSEAS

Throughout the world in over one hundred countries Chaseside machines are at work cutting handling and construction costs and helping to raise standards of living. Today, a very large proportion of the output of Chaseside machines from our works at Hertford and Blackburn goes overseas where the demands of the users are, if anything, even more exacting than those of users in this country. Chaseside machines combine the virtues of strength, speed, economy, durability and ease of operation and maintenance—virtues which are valued the world over. For any loading shovel user—whatever the job, wherever the job, a Loadmaster is quite unbeatable. Backed by 17 Service Centres throughout the United Kingdom. For details of the complete range of Chaseside shovels write to:

CHASESIDE ENGINEERING COMPANY LIMITED
(A subsidiary of British Northrop Limited)
STATION WORKS, HERTFORD, HERTS.
TELEPHONE: HERTFORD 3113 TELEGRAMS: CHASESIDE HERTFORD

CD613



LOADMASTER
1,000, 2,000, 3,000
4 WHEEL DRIVE
SERIES



LOADMASTER 500



LOADMASTER 800TC



LOADMASTER 700



LOADMASTER 110
'HIL LOAD'



HI-SPEED DUMPER

COME TO CRIPPS WITH THOSE TOUCH JOBS

The Scammell 'Sherpa' Dump Truck is designed especially to give dependable service under the severest conditions, whilst retaining light enough unladen weight to allow maximum legal payload on the highway. Spares are readily available.

Obtainable from Cripps—the sole U.K. concessionaires—and backed by Cripps inimitable service, of course. Please write for detailed description and specifications.



THIS MIGHTY TEAM WILL



CRIPPS

for SCAMMELL

R. CRIPPS & COMPANY LIMITED

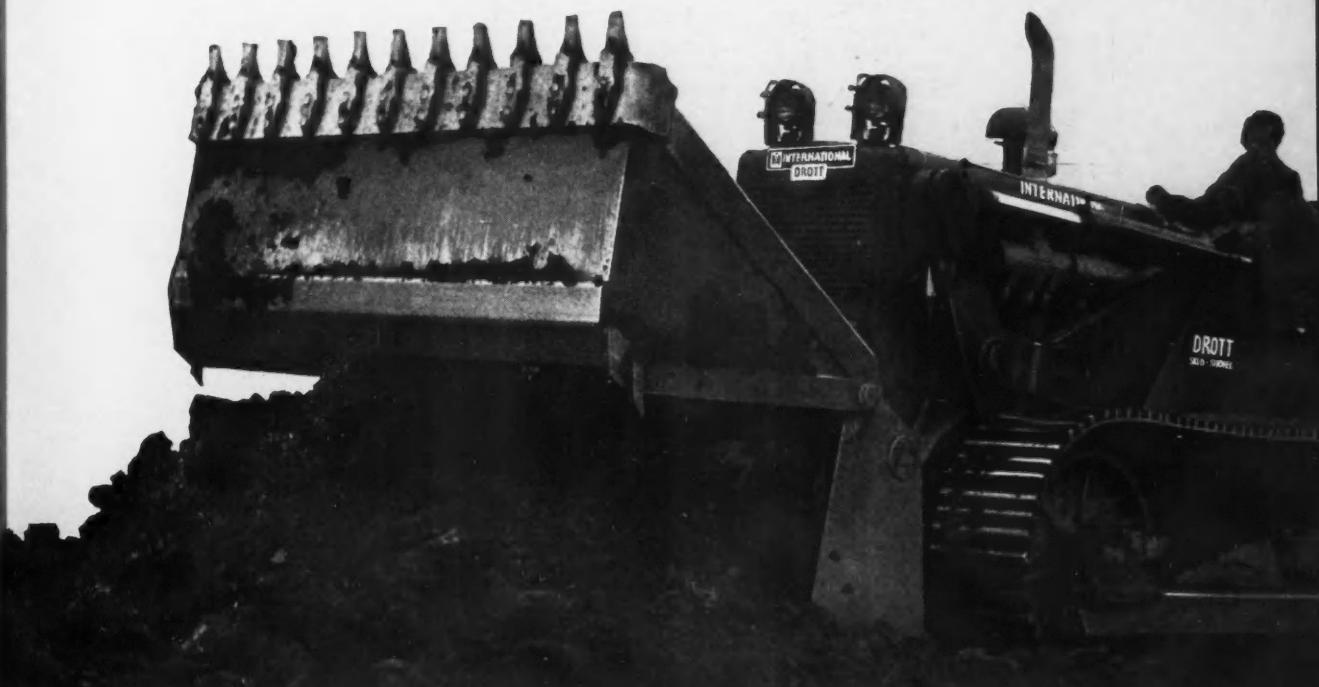
SOLE CONCESSIONAIRES IN THE UNITED KINGDOM

DUMP TRUCKS

The mighty British-built International B-20-K3 Drott Skid Shovel of 3 cubic yards capacity, with standard or "4 in 1" attachment, can tackle the biggest digging, grading, spreading, lifting and carrying jobs. The Tractor, powered by a Rolls Royce 6 cylinder engine of 124 H.P., has exceptional manoeuvrability with six speeds both forward and reverse.



TACKLE THE BIGGEST!



CRIPPS

For Construction Equipment—the finest on tyres and tracks!

R. CRIPPS & COMPANY LIMITED for I.H. SALES AND SERVICE

NOTTINGHAM Telephone 71161. MANCHESTER Telephone Trafford Park 16558. SHILDON Telephone 281

for



SIX REPEAT ORDERS IN ELEVEN MONTHS

... proof positive of the reliance placed on Weatherill quality by leading quarry owners—like Hall & Co. Ltd. They know from experience that Weatherill Hydraulic Loading Shovels have that extra, 'take-anything' toughness that's essential for quarry work.

The Weatherill Hydraulic 12H and 14H machines seen here are unbeatable for power, performance and reliability—Weatherill Shovels give you more work, better work in less time and with less effort.



WEATHERILL HYDRAULIC

BACKED BY THE F.E.W. SPARES AND SERVICE ORGANISATION

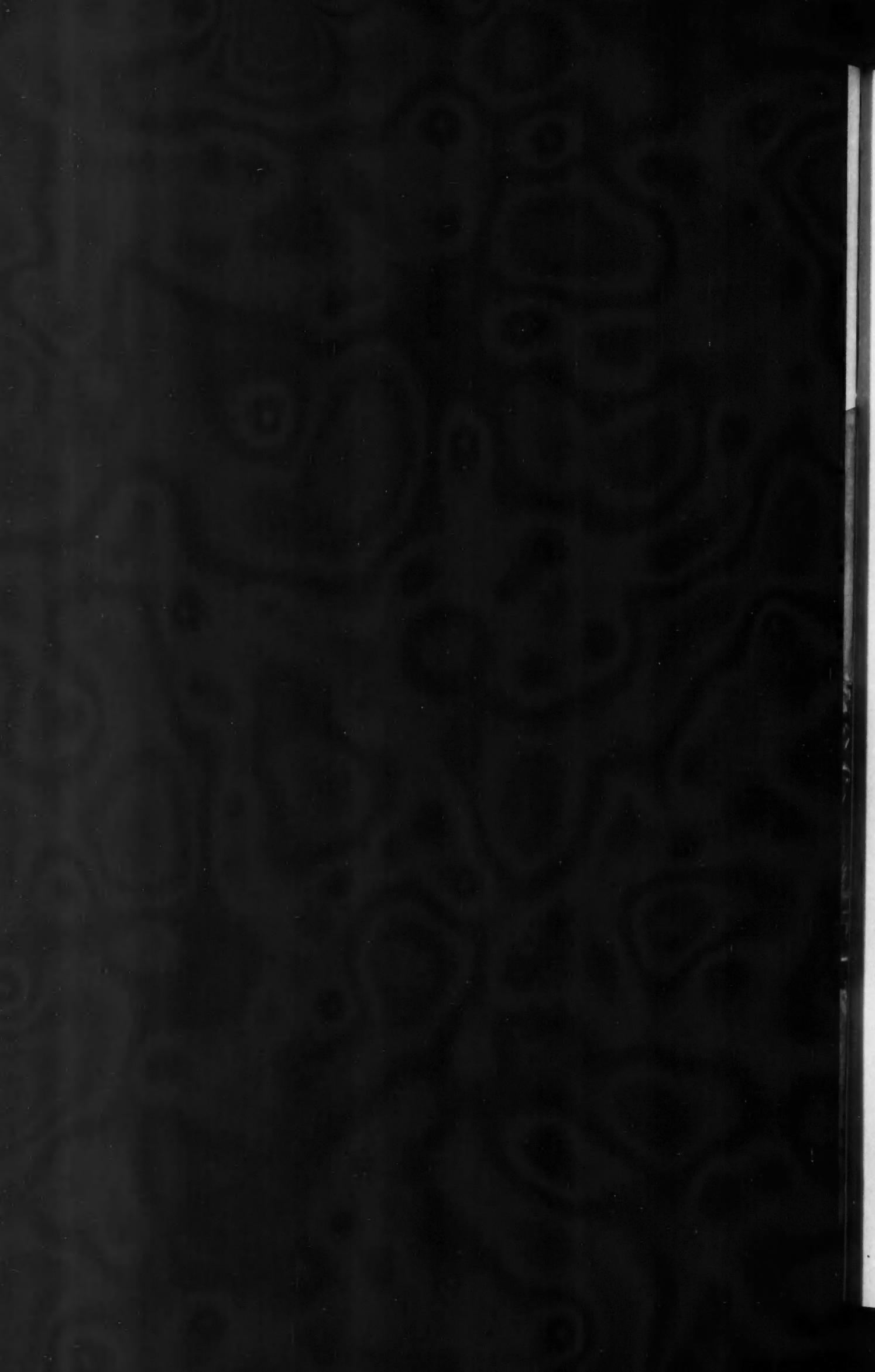
Send for full details to:—

F. E. WEATHERILL LTD TEWIN ROAD • WELWYN GARDEN CITY • HERTS • TEL 4221 (5 Lines)

Britain's largest loading shovel manufacturers

SPARES & SERVICE DEPOTS IN LONDON • WALSALL • MANCHESTER • WEST HARTLEPOOL & GLASGOW

S
ON
S)
W



MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

NOTICE.—Orders for advertising are accepted on understanding that the Editor may make any alterations in an advertisement to ensure its conformity with the style and standards of "The Contract Journal." The Proprietor reserves the right to amend, cancel or refuse an advertisement without stating any reason. No undertaking is given that an advertisement will be published on any specified date. Communications which are not actual replies to the advertisement will not be forwarded. The Proprietor reserves the right to open communications and withhold those not in accordance with this rule.

FOR temporary roadways and compound fences. **C. EVANS AND SONS, LTD.**, offer Sommerfeld TRACK 500 rolls, each 25yd. x 10ft., interlaced at 9in. centres with 3in. M.S. rod; and Pierced Steel TRACK (airfield strip), standard 10ft. x 16in. x 1in. First-class, re-layable.

Contact: **C. EVANS AND SONS, LTD.**, Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

FOR SALE: Quantity of Pressed Steel SECTIONAL TANKS, 4ft. x 4ft. x 4ft., complete with bolted cover and flanges, made of Sunited marine-grade plates, 4ft. x 4ft. x approx. 1in. thick. Delivery ex stock. — **THE MIDLAND IRON AND HARDWARE CO. (CRADLEY HEATH), LTD.**, Cradley Heath, Staffs. Tel.: Cradley Heath 66364-5-6.

I'S PLAN FILING YOUR PIGEON? Then you MUST consider our ECONOMY Plan Chest. Britain's finest value in drawing office furniture. Double Elephant Size, only £25. 10s. other sizes stocked. May we send sample plan approval? — **GLASHILL (OFFICE FURNITURE) LTD.**, (Dept. W.C.), Green Lane, Hounslow, Middlesex. Telephone: Hounslow 7281-7.

TRUSCOTT FENCING, LTD., DORKING SURREY. Telephone 3416. All classes of FENCING supplied and erected. Specialists in Chain Link. Estimates free.

WANTED: CORRUGATED STEEL SHEETS, Second-hand. Any areas. Sites cleared. Prompt payment. — **DUFFY, BANK STREET**, Clayton, Manchester, 11. Telephone: East 3361.

FOUR 12in. x 8in. R.S.I. 46ft.-48ft. long, in as new condition, for SALE.—Apply: **R. G. HORTON (ENGINEERS) LTD.**, Sinnott Road, London, E.17.

MUCK SHOOTS in Mill Hill and Southgate, London. For details, phone Bowes Park 2402.

WANTED, SCAFFOLDING, PROPS, TRENCH SHEETING, etc., and all types of NON-MECHANICAL BUILDERS' PLANT. Sites cleared by arrangement.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

FOR SALE. 80 tons first-class second-hand 75lb. F.B. RAIL, 30-36ft. lengths. 180 tons first-class SIDINGS RAIL, 85lb. B.H., 60ft. lengths.

Apply: **GEORGE COHEN SONS AND CO. LTD.**, Stanningley. Telephone: Pudsey 2241.

FOR SALE. 54 NO. 2 ACROW FLOOR CENTRES, 25/- each. STEEL SHUTTERING, by Blaw Knox, used once, as new, half new price. Various sizes of panels with fittings. 4ft. down to 10ft. — **J. WALKER AND PARTNERS, LTD.**, 23 Claremont Crescent, Sheffield, 10. Tel. 62428-9.

SECOND-HAND SECTIONAL TIMBER BUILDINGS, 24ft. x 12ft. £102; 30ft. x 15ft. £138; 40ft. x 18ft. £192; 60ft. x 20ft. £302. Floors extra. Delivery included 100 miles. Also similar New Buildings. Lists. — **UNIVERSAL SUPPLIES**, Crabtree Manorway, Belvedere, Kent. Tel.: Erith 32948.

SCAFFOLDING. — Urgently WANTED, Steel and Alloy SCAFFOLD COUPLERS. Inquiries for Non-mechanical Builders' Plant welcomed. — **SCAFFOLDING SERVICES**, 69 Upton Lane, Forest Gate, London, E.7. Tel.: Gra. 2002.

HARDCORE and PITCHING. — Unlimited quantities of Cold Blast Slag available in the Midlands, for road works and filter media.

NEWHEY WEARING, LTD., Parkdale, Wolverhampton. Telephone 20914.

WANTED: Alloy and Steel TUBULAR SCAFFOLD, in large quantities only. Sites cleared anywhere. Also NON-MECHANICAL BUILDER PLANT. Contact: **C. EVANS AND SONS, LTD.**, Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

MOBILE LIVING UNITS AND OFFICES built to specification for Home and Overseas contracts. Write **TRAILER HOMES, LTD.**, Shannon Corner Kingston By-pass, New Malden, Surrey.

SITE GOODS. — RAILWAY SLEEPERS, sound, second-hand 1-50, 11/9in. each; 51in. 11/3in. each; 50 and over 10/9in. each. Collected ex yard. 10/9in. Sommerfeld TRACK rolls. 25yd. long x 10ft. wide. M.S. rods, 9in. centres, £12 10s. per roll. TARPAULINS, second-hand, overhauled, ropes and eyelets: 18ft. x 21ft. £6; 18ft. x 15ft. £6 15s.; 24ft. x 15ft. £11.

A. F. SIMPSON, LTD., 68/70 Penge Road, South Norwood, S.E.25. Telephone: Sydenham 3131 (3 lines).

FOR SALE. Two Finlay 50-ton Hydraulic Hand-operated BAR STRAIGHTENERS.

One Galvanised Tank HEAT EXCHANGER to hold 1,000 gallons.

Number of Electric MOTORS and PUMPS.

One 440-gallon Vertical Steam BOILER.

ROBINSON AND MCGING CONSTRUCTION, 87 King Street, Alfreton, Derby. Tel.: Alfreton 290.

CIRCULAR TIPPING SKIPS. 2½ cu. ft. to 2 cu. yd.

CONCRETE POURING SKIPS also available.

For SALE and HIRE.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

SLEEPERS. 100 tons Crossing Sleepers, from 9ft. to 13ft.

J. A. K. SHEPLEY AND CO. LTD., 5 Meadow Street, Manchester, E.1. ARDwick 2236.

FOR SALE: Little Giant Burton DOUBLE COUPLERS, £0.000, in good condition. SWIVELS, JOINT PINS and PUTLOG CLIPS also available.

Contact: **C. EVANS AND SONS, LTD.**, Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

NEW ROADFORM PINS for SALE. Made to your specifications, 1in. or 7/8in. dia. — **TEMPLE MILLS (STEEL) LTD.**, Temple Mills Lane, Stratford, E.15. Tel.: Maryland 2660/7734.

TUG 52ft., 120-h.p. A.E.C., large engine room, bench and vice. All controls in large well-visioned wheelhouse, flush toilet, sleep six, £1,200. — **HAMOND, Point Road**, Canvey Island, Essex.

FOR SALE, large quantity of unused SCAFFOLDING, TUBING and CLIPS. Detailed lists and prices from: **BOWMANS**, Ballards Wharf, Poole. Poole 334.

PODMORE WORKS

SITE HUTS FROM STOCK
FRONT - WIMBLEDON
760-773, GARRATT LANE, SW17

SOMMERFELD TRACKING

Sound S/M, approx. 25yd. rolls, 10ft. wide, reinforced every 9in. with 3in. M.S.R. £12 10s. per roll. C.P. London area, or 10-roll lots throughout England.

A. F. SIMPSON, LTD., 68/70 Penge Road, London, S.E.25. Telephone: SYDenham 3131/5.

NEW TARPAULINS

EXACT SIZES ONLY

JUTE, 16oz. before green wax proofing: 12' x 9' each 66/-, 15' x 12' each 100/-, 18' x 12' each 115/-, 21' x 15' each 156/-.

FLAX, 16oz. before green chemical proofing: 12' x 9' each 87/-, 15' x 12' each 139/-, 18' x 12' each 186/-, 21' x 15' each 218/-.

COTTON DUCK, 14oz. before green wax proofing: 12' x 9' each 90/-, 15' x 12' each 148/-, 18' x 12' each 174/-, 21' x 15' each 252/-.

BRAND NEW SHEETS, carriage paid England and Wales. Fitted long ropes. Brass eyelets and strengthening patches.

ANY QUANTITY FROM LONDON STOCK

JOHN MACNAMARA & CO. LTD., Bush Road, Deptford, London, S.E.8. BER 3275-1433

FOR SALE

Large quantity of secondhand

SLEEPERS

Suitable for making cart roads, silage bins etc.

THOS. W. WARD LTD., Albion Works, Sheffield. Tel: 26311 Ext. 239

IT'S GOOD FENCING IT'S SUPREME

FOR FENCING OR ERECTED COMPLETE TRAILER LTD. 10 STATION ROAD WATFORD MERTS. WATFORD 5223

SPECIAL OFFER OF LARGE SIZE TUBE

10in. Tube in lengths up to 40ft.
12in. Tube in lengths up to 40ft.
14in. Tube in lengths up to 20ft.
15in. Tube in lengths up to 20ft.
16in. Tube in lengths up to 40ft.
18in. Tube in lengths up to 25ft.
20in. Tube in lengths up to 20ft.

All of these sizes can be supplied plain ends or flanged. Also in stock a quantity of 24in. Tube, flanged in lengths of approximately 24ft.

Large stocks of smaller size tube always available.

MIDLAND IRON & HARDWARE CO. (CRADLEY HEATH), LTD., CRADLEY HEATH, STAFFS

Telegrams: Pipes, Cradley Heath

Telephone: Cradley Heath 66364-5-6

Order your
HARDCORE
from
MACNOR
Anywhere in the South of England
RELIABILITY • CONTINUITY • PUNCTUALITY

MACNOR BUILDING SUPPLIES LTD
87 BRIXTON HILL • LONDON • S.W.2
Tel. 5444 Tel. 2964

FENCING
SUPPLIED AND ERECTED IN ANY DISTRICT

W. A. SKINNER & CO. LTD.
LONG DITTON, SURREY
Phone: EMBERBROOK 114-161

GRANITE SETTS
DELIVERED ANYWHERE
HARRIS & BAILEY LTD.
CROYDON
ADDcombe 3181 Ref: Mr. T. A. Jones

HARDCORE

Keen rates for delivery in London and Southern Counties

W. S. WRIGHT LTD.

I Salisbury Road, Bromley, Kent

Phone: RAV. 1148-9



Karisco
steel-framed, prefabricated
BUILDINGS

for
FACTORY BUILDINGS,
WORKSHOPS, PLANT STORES,
ETC. ETC.

- No on-site riveting or welding
- Speedy erection
- Permanent or temporary
- High recovery value

30ft. to 100ft. clear span; lengths in any multiple of 12ft. dia.
Write for leaflet K.104

THE LILLESHAL COMPANY LTD.
ST. GEORGES - OAKENGATES - SALOP.
Oakengates 120

WHITLOCK MOBILE SITE OFFICES

WHITLOCK BROS LTD • GREAT YELDHAM ESSEX • Tel: 305

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

SCAFFOLDING, etc., for SALE at LOW PRICES: FULLY RECONDITIONED, SCAFFOLDING, PLATES, LADDER, COUPLERS, etc.—all makes available. Putlog Couplers from 2½"; Double Couplers from 3½"; Used Steel and Alloy Scaffolding TUBE and PUTLOGS. Used SHORING PROPS and TRENCH STRUTS. Good used SCAFFOLD BOARDS and Scaffold FRAMES. SOULSBY AND CO., 87 Duxbury Lane, Edgware, Middlesex. Telephone: MILL Hill 4644 (or 1855) or NORTH 4112.

SOUND SECONDHAND PLANT. 1,000 No. 1 Acrow PROPS, 39/6 each; 50ft. No. 2 Acrow PROPS, 45/6 each; 20,000ft. 13/21ft. Steel STEPS, 1 ½ ft.; 100,000 shorter lengths, 1/2ft.; S/H SCAFFOLD BOARDS, 1 ½ ft., all lengths. A. F. SIMPSON, LTD., 68/70 Penge Road, South Norwood, S.E.25. Telephone: Sydenham 3131 (3 lines).

C. EVANS AND SONS, LTD., have available a wide stock over 250,000 SCAFFOLD COUPLERS, including Bostitch, Little Giants, Norstel, Big Ben, SGB, Bouton, M.A.C., Mills and No. Bolts. Send for our detailed lists. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

FOR SALE: 6,000 RAILWAY SLEEPERS. Guaranteed Grade S. Suitable for slabs, roadways, buildings, bridges, machinery, etc.—Write, 'phone or call: JOHN HILROY AND CO., 290 Shirley Road, Southampton. Telephone: 76230.

NEW BOARDS, selected 9in. x 1 ½ in., cornered and bound, ex works.—Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Telephone: ADVANCE 5691/2/3.

FOR SALE: NEW ROADFORM PINS, 5ft., 6ft., or 1in. dia. x 2ft. long.—TEMPLE MILLS (STEEL), LTD., Temple Mills Lane, Stratford, E.15. Tel.: Maryland 2660/7734.

FOR SALE, six CONCRETE TANK LIGHTERS, from £150 each, lying, Thames.—Write Box M.2372, "The Contract Journal."

LADDERS FROM STOCK
STEPS • TRESTLES • BOARDS • DUST SHEETS
Price List from THE PODMORE WORKS
769/773 Garratt Lane, S.W.17. Tel: Wimbledon 7622

BEFORE DECIDING, view this plant
Immediate delivery and terms arranged.
FOR SALE:
100,000ft. STEEL SCAFFOLDING TUBE: 5,000 FITTINGS, all sizes; 2,000 BLADE-END PUTLOGS, 5ft. and 6ft.; 500 Acrow Type PROPS; 500 TRENCH PROPS; 10,000ft. SCAFFOLD BOARDS, fully bound. Immediate delivery.
M. SANDERS, LTD., 18/20 Medlar Street, London, S.E.5. ROD. 5143.

CONTRACTORS' AND BUILDERS' TOOLS
JOHN MACNAMARA & COMPANY LIMITED
BUSH ROAD, LONDON, S.E.8.
BERMONDSEY 3275 & 1435

EDWARD ASH, LTD.
FOR
RAILWAY SLEEPERS
AND
CROSSING TIMBERS
KENT WHARF, CREEKSIDE, DEPTFORD, S.E.8
Telephone: TIDeway 2861-2

YOUNGS FENCING

ALL TYPES SUPPLIED
FIRST-CLASS ERECTION SERVICE
Phone: ORPINGTON 26641 (3 Lines)

YOUNGS OF ORPINGTON LTD.
211-215 HIGH ST., ORPINGTON KENT

Harlow Bros. GO TO GREAT LENGTHS

All Harlow Huts are constructed from selected timbers and are unusually robust for constant use. Standard sizes from 8' x 6' to 100' x 24' and larger. Built in units that can be added or deducted to make any size of Building required—can be delivered within seven days of order.

WRITE FOR FREE ILLUSTRATED LITERATURE OF OUR COMPLETE RANGE

LONG WHATTON • MR. LOUGHBOROUGH
LEICS. Telephone: HATHERN 351

ELECTRICIANS.—Send for details SHAFTESBURY LIGHTWEIGHT "BANTAM" LADDERS. Top section fitted with patent MILDRED RUBBER BLOCKS, eliminate possibility of scratching or marking walls, fascias and other painted or highly polished surfaces. Also available for immed. delivery: STEPS, PLATFORM STEPS, TRESTLES, TELESCOPIC TRESTLES, POLE and BUILDERS' Type LADDERS, and all sizes of Two and Three Section EXTENSION LADDERS.

SHAFTESBURY LADDERS, LTD. (C.J.), 453 Katherine Rd., London, E.7. Grangewood 3363-4.

GREASE GUNS, heavy duty, 70 per cent. off list price, Tecalemit, 29/2oz. flexible tube, hexagon head, hand lever operated. Brand new condition, 60/- each, sit at 55/-, 20 at 48/- Hydraulic head, 10/- extra.

CROMWELL CO., Newport, Mon. 59045.

ALWAYS AVAILABLE—Large stocks of Re-layable SLEEPERS, chaired and plain, and Re-layable CROSSING TIMBERS, lengths from 9ft. to 18ft. Also Roadway Quality.—P. GATHERCOLE, 25 Harrowby Lane, Grantham, Lincs.

DERBYSHIRE LIMESTONE, all grades, dry or tared up to 200 tons per day, or graded smaller sizes available, delivered to site.

GEORGE DAVIS (HAULAGE), LTD., 2 Bosworth Road, Nottingham. Telephone: 84419.

FOR SALE: PUTLOGS, Steel and Alloy, 5ft. and 6ft. Large stocks always available. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

FOR SALE: NISSEN HUTS, Galvanised Sheeted, 36ft. long, 16ft. wide, at £75 each. DITTO, Black Iron Sheeted, at £65 each.

F. JAMES & SONS, Newport Pagnell. Tel. 18 and 19.

FOR SALE, 800 Acrow FLOOR CENTRES, Nos. 2, 3 and 4; Synchronised BEAM CLAMPS, Nos. 2, 3 and 4.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

SECTIONAL TIMBER BUILDINGS

For quality with economy, buy "MIDDLESEX" Standard size range from 8' x 6' to 100' x 30'.

J. E. LESSER & SONS LTD.
GREEN LANE HOUNSLAWN, MIDDLESEX
Telephone: HOUNSLAWN 7281/7

TARPAULIN HIRE

JOHN MACNAMARA LTD.
BUSH ROAD, LONDON, S.E.8
BERMONDSEY 3275 & 1435

PILE DRIVING • DIVING

Piling Work carried out afloat and on shore in London and Home Counties.

Crane Barges and Heavy Lifting Equipment for hire.

Diving carried out with expert divers using modern equipment.

Underwater Cutting and Welding Work a speciality.

PILE DRIVING • DIVING
JOHN MACNAMARA LTD.
BUSH ROAD, LONDON, S.E.8
BERMONDSEY 3275 & 1435

PILING AND PLANT HIRE CO. (KENT) LTD.
Abbeydale Road, Wembley, Middlesex
Perivale 4471/73

CAST-IRON SPIGOT and **SOCKET PIPING**, mostly new, standard lengths. Immediate delivery, 16in. bore, 100ft. 9in. bore, 200ft. 15in. bore, 200ft. 12in. bore, 500ft. 6in. bore, 500ft.

10in. bore, 100ft. **CAST-IRON FLANGED**, mostly new, 15in. bore, 11 x 12ft. lengths.

10in. bore, 200ft. 12in. bore, 200ft. Stanton.

8in. bore, 200ft. 6in. bore, 500ft.

4in. bore, 500ft. chiefly 9ft.

Also large selection **BENDS, SLUICE VALVES**.

FULL details on request.
FRED WATKINS (ENGINEERING), LTD., Coleford, Glos.

FOR SALE, 70,000 Mills ex Government Type 90° SCAFFOLD COUPLERS in stock, 3/- each. Carriage paid up to 150 miles for orders of 100 or more. Tel: LEAF 4881, 354/5/6. Alrewas, Staffsshire. Telephone: Alrewas 354/5/6.

TRENCH SHEETS, 6ft.-12ft. **STRUTS** and **DRIVING PLATES**, sizes available. For **SALE** an entire **PLANT AND BUILDING EQUIPMENT**, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATters 9213.

FOR SALE, Corrugated Sheet **STEELS**, new and second-hand. Most sizes and gauges in stock. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

EIGHT PORTABLE LIVING VANS for **SALE** (13ft. x 6ft. x 7ft.), suitable offices, staff quarters, stores, etc.—Apply: HILLIER, Cleeve House, North Bradley, Trowbridge, Wilts.

SLEEPERS for access roads and all purposes. **TIMBERS** for shoring, paling and walling. Consult us first.—**TRACK SUPPLIES AND SERVICES**, LTD., Horton, Northants. Telephone: Hackleton 240.

WANTED, **TRENCH SHEETING**, used, Type LB, 23 ft. 7in. and 51 ft. 10in.—Offers to: JAMES RICHMOND, LTD., West Street, Retford, Notts.

RAILWAY SLEEPERS

10,000 in stock

BEFORE ORDERING RAILWAY MATERIALS OF ANY KIND

WRITE OR TELEPHONE:

E. L. PITTS & CO. (Coventry) Ltd.

BRACKLEY TOWN STATION,

BRACKLEY, NORTHANTS

Telephone: BRACKLEY 2271/2

Telex: 83159

TARPAULINS

NEW, GREEN, ROT-PROOFED, SEAMS DOUBLE-SEWN WITH BEST LINEN THREAD; REINFORCED BRASS EYELETS, SPLICED ROPE

Weight before proofing:
(15oz.) (18oz.) (15oz.)
Size approx. JUTE FLAX C. DUCK

12ft. x 9ft.	£2 15 0	£4 3 6	£4 9 6
15ft. x 9ft.	£3 15 0	£5 2 6	£5 12 0
15ft. x 12ft.	£3 19 6	£6 17 6	£6 9 6
18ft. x 12ft.	£5 18 9	£8 6 0	£8 18 0
18ft. x 15ft.	£5 9 6	£8 15 0	£8 15 0
20ft. x 15ft.	£8 9 6	£11 10 0	£12 11 6
24ft. x 18ft.	£11 17 6	£16 10 0	£17 18 6
30ft. x 21ft.	£17 6 6	£24 0 0	£25 17 6

EX-GOVERNMENT, RECONDITIONED

10ft. x 7ft.	£1 50	18ft. x 15ft.	£6 00
10ft. x 10ft.	£2 00	20ft. x 15ft.	£6 10 0
14ft. x 10ft.	£3 50	20ft. x 14ft.	£8 10 0
15ft. x 12ft.	£4 10 0	24ft. x 18ft.	£10 10 0
20ft. x 10ft.	£4 19 6	30ft. x 20ft.	£14 00
18ft. x 12ft.	£5 50	30ft. x 30ft.	£19 10

All sheets are eyeleted and roped.

Immediate delivery — Carriage paid.

Money refunded if not satisfied.

MORELAND TRADING Co. Ltd. (C)

25 St. Pancras Way, London, N.W.1

Telephone: EUSTON 5210 and 2383

Genuine Bargains in Ex-Gov. Recond.

PLAN CHESTS

Double Elephant size. Soft-wood, reconditioned. Rich brown finish.

6 Drawer ...	£20 15 0
8 Drawer ...	£23 0 0
10 Drawer ...	£25 5 0
Carriage £1 10 0	

Enquiries invited for plan chests—steel, oak or mahogany, new or reconditioned.

4-DRAWER FILING CABINETS

Foofscap, plywood panels. Finished rich brown shade. Reconditioned. £6 15 0 Carriage 15/- extra

FOLDING FORMS

Sound, well made. 6ft. x 10in. 17/6 Carr. Paid

FOLDING TABLES from 27/6. **FOLDING CHAIRS**, 12/6, and many more bargains in Office Furniture, Racks, Benches, Cupboards, Lockers, etc. Write for Illustrated Lists.

Bloom & Spivack (Furniture) Ltd., 138 Old Street, London, E.C.1. CLE 0138

MISCELLANEOUS ITEMS, ETC.

FOR SALE. 500 tons re-layable 75lb. per yard F.B. RAILS, in 36ft. lengths, with fishplates and fishbolts, etc., to suit.
20 CROSSINGS in re-layable 75lb. per yd. F.B. rail, with all necessary fittings, £100 per crossing.
100 re-layable 95lb. per yd. B.H. RAILS, in 60ft. lengths, with fishplates to suit.
2,000 re-layable CHAIRED SLEEPERS, suitable for 95lb. per yd. B.H. rail.

EDWARD ASH, LTD.,
Kent Wharf, Creekside, Deptford, London, S.E.8.

SCAFFOLD FITTINGS in makes S.G.B., Mills, Burton and Big Ben, etc., including Double Couplers, Swivel Couplers, Joint Pins and Putlog Clips, from 2/11 each. All fully overhauled and in ready for work condition.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

FOR SALE. 400 Type No. 1, 1,500 Type No. 2, 1,000 Type No. 3. All in perfect condition.

Contact: C. EVANS AND SONS LTD., Burnsides Wharf, Burnsides Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

NISSEN - TYPE HUTS, 16ft., 24ft. and 30ft. span, clad new or second-hand sheeting. Also new Galvanised NISSEN SHEETS for SALE, all standard sizes. — NAYLORS (BILSTON), LTD., 204 Wolverhampton Street, Bilston, B10 1889.

WANTED. Alloy and Steel SCAFFOLDING from Sit. up. Also FITTINGS. Acrow Type PROPS, REINFORCE RODS, any lengths. — Send full particulars to: E. WENTWORTH, 11 Thurlow Park Road, London, S.E.21.

TARPAULINS for SALE and HIRE. — EDWARD ASH, LTD., Kent Wharf, Creekside, Deptford, S.E.8. Telephone: Tideway 2661/2.

ONE HUNDRED Heavy Oak TIMBERS, 6ft. long, 12in. x 12in., first-class condition, 30/- each. L. W. VASS, LTD., Amphyll, Bedford. Telephone: 3255/6.

WANTED. TRENCH SHEETS, Acrow PROPS, any quantity. — Contact: C. EVANS AND SONS LTD., Burnsides Wharf, Burnsides Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

PORTABLE SECTIONAL WOODEN BUILDINGS for SALE, 72ft. x 21ft. — KAYE (BIRMINGHAM) ENGINEERING, LTD., 130 Moseley Road, Birmingham, 12. Tel.: Vic. 1278.

NISSEN TYPE HUTS for SALE. Prompt despatch of 16ft., 24ft. and 30ft. wide Huts; also Romney HUTS, 35ft. wide, and BLISTER HANGARS, 86ft. 6in. and 91ft. wide. These buildings are in various lengths, and comprise steel framework with galvanised corrugated steel sheeting. — Full details from Dept. (128), J. THORN AND SONS, LTD., Brampton Road, Bexleyheath, Kent. Telephone: Bexleyheath 0021.

WANTED. STEEL ROUNDS, SECTIONS, CORRUGATED SHEETS, Steel and alloy SCAFFOLDING FITTINGS, SCAFFOLD BOARDS. Large and small quantities permanently required. Attractive prices, good payments, rapid decisions. E. H. CHURCH AND CO. (EDMONTON), LTD., 68/70 Penge Road, S.E.25. Tel.: SYDham 3131.

KINDERSLEIGH, LTD., have one of the largest stocks in the country of ex Ministry OFFICE and SITE OFFICE FURNITURE. Also DRAWING TABLES and BOARDS, DRAUGHTSMEN'S STEEL REFERENCE DESKS, with Plan Drawers. — Estate Office, High Legh, Knutsford. Telephone: Lynton 417.

NEW SITE HUTS, 2in. x 2in. frames, 5in. ship-lapped weatherboarding, 3in. T. and G. floors, 2in. boarded and felted roof, 8ft. x 6ft. £36 5s.; 10ft. x 6ft. £42 5s.; 12ft. x 6ft. £48 5s. Carriage paid 25 miles from London. — H. C. HILL, LTD., 68/70 Penge Road, S.E.25. Tel.: SYDham 3131/5.

FOR SALE: EVANS OF BOW offer from stock 2,000 "H" FRAMES, 4ft. 6in.; also ADJUSTABLE JACKS. All in first-class condition.

Contact: C. EVANS AND SONS LTD., Burnsides Wharf, Burnsides Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

WANTED. used Corrugated Steel SHEETS, W from 4ft. and up, 22-gauge or heavier. Also Anderson and Elephant SHEETS.

Contact: C. EVANS AND SONS LTD., Burnsides Wharf, Burnsides Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

WANTED. AIRCRAFT HANGARS of all types and sizes. STEEL-FRAMED BUILDINGS: ELEVATED and STATIC TANKS. Top prices paid. Full details to ARCAM, Lower Broadheath, Worcester. Telephone: Hallow 361.

FOR SALE: 5½in. P.V.C. WATERBAR (Hydrafold Sections) 600ft. in seven lengths available at cut price. — SIR ALFRED McALPINE AND SON, LTD., Bedford Road, Rock Ferry, Birkenhead. Telephone: Rock Ferry 2241.

WANTED. Braithwaite SECTIONAL TANKS or LOOSE PLATES, 4ft. square, 5in. to 5in. thick. — FRED WATKINS (ENGINEERING), LTD., Coleford, Glos.

STEEL SECTIONS and PLATE, etc. Cut to your specification. New and second-hand material available. — TEMPLE MILLS (STEEL), LTD., Temple Mills Lane, Stratford, E.15. Maryland 2660/7/24.

FOR SALE: SCAFFOLD MATERIALS. For keen prices, service and quality. — Contact: C. EVANS AND SONS LTD., Burnsides Wharf, Burnsides Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

POOLEY 20-ton WEIGHBRIDGE, excellent condition, dismantled and loaded on to vehicle. £285. MOLE AND BRAY, LTD., Stourport-on-Severn. Telephone: 2361.

WANTED: BRICK and CONCRETE HARDCORE, any quantity. — R. BARKER (PECKHAM), LTD., New Cross 3337.

A FEW tons of PILING in about 5ft. lengths. £20 per ton f.o.v. — BOWMANS, Ballards Wharf, Poole Quay, Poole 334.

STEEL PLATES and SECTIONS to size. Also TUBES up to 10in. n.b. — E. STEPHENS AND SON, LTD., Bath Street, E.C.1. Tel.: CLE. 1731.

ELECTRICAL, SPARES AND OVERHAULS,
VEHICLES AND ANCILLARIES

FOR SALE. Caterpillar D7 ENGINES, new and unused, in original maker's cases.

Two DA 10 Tonner Double Drum WINCHES. Five Hyster DIN LOGGING WINCHES. One TD18 Carco TIMBER WINCH. Large quant. new International and Caterpillar SPARES. 19RB, 9000 Series Sk. and B/A. In excellent cond.

J. BERGIN (PLANT) CO., LTD., 1112 Harrow Road, London, N.W.10. Ladbrooke 1347; night: Isleworth 5856.

SPARES FOR SALE. 108D Muir-Hill Dumpers. C.P.T. Compressors.

Bow Knox 125. List prices less 40 per cent. discount for complete lots. Lists on application.

WILSON PLANT HIRE, LTD., Weedon Rd., Northampton. Tel.: Northampton 4653/4.

FOR SALE: INTERNATIONAL ROLLERS, TRACK PIN BUSH GROUPS, TRACK BOLTS and other SPARES. Write Box E.1889, "The Contract Journal."

NEW 1800 x 24 EARTHMOVER TYRES, 16-ply, two shock pads, by Goodyear, Firestone and U.S. Royal, £95 each. — T. LEAVESLEY, LTD., Aireborough, Staffordshire. Telephone: Alrewas 354/5/6.

AS NEW — Rogers multi-wheel 40-ton TRAILER, £375 g.n.c. Also 10-ton TIMBER POLE WAGON, £200. — D. FOSTER, LTD., Swiss Road, Waterloo, Hants. Telephone: Waterloo 2457/8/9.

FOR SALE: 300/400-Amp. Murex Diesel driven WELDING SET, in good order. — WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel.: 63905.

REQUIRED. SIDE ARM ATTACHMENT for Priestman Cub or Wolf Excavator, incomplete, or requiring attention would be considered. — JAMES RICHMOND, LTD., West Street, Retford, Notts.

CATERPILLAR 17000 V8 DIESEL ENGINE for SALE, suitable for Lima 802. — ROADS AND RUNWAYS, 26 Victoria Street, London, S.W.1. Telephone: ABBEY 4905.

FOR SALE: Ruston 3VRO ENGINE, in good condition, complete with bearers, clutch and radiator. FARMER, Old Town, Pelsall, Staffs.

WE BUY REPLACEMENT PARTS for Caterpillar Tractors. — Send offers to Box Q.Q.396, "The Contract Journal."

FOR SALE: Highway DRILL SPARES. Good discounts off list. — Write Box E.2373, "The Contract Journal."



Trelawny
FOR TRACKS

Tel: LEAMINGTON SPA 8622/3

RUSTON

SERVICE EXCHANGE ENGINES
GENUINE SPARES

TILSLEY & LOVATT LTD.

STOKE-ON-TRENT, STAFFS

PHONE: 57331/2

GRAMS: DIESEL

**COACH SPECIALISTS
of the SOUTH**

always have available a

Large stock of Good Used
PASSENGER VEHICLES

many with C.O.F.s

Ideal for conveyance of staff

Yearly Road Fund Tax £12.10.0

BEDFORD 26 str. Coaches from £75 or suitable for SITE OFFICES, from £50. **A.E.C., LEYLAND**, etc., 33/35 str. from £100

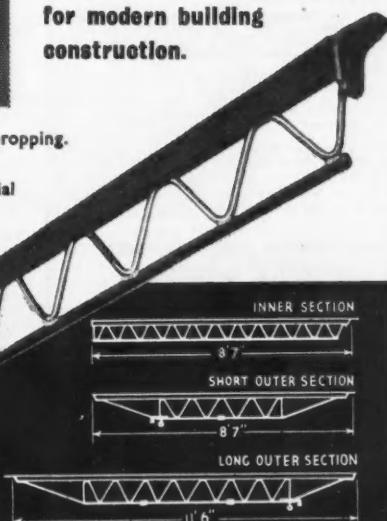
Let us demonstrate at your premises

E. J. BAKER & CO. (DORKING) LTD.

The Coach Works, Farnham Trading Estate, Farnham, Surrey. Telephone: 4626/7

HICG
V 200-D CENTERING

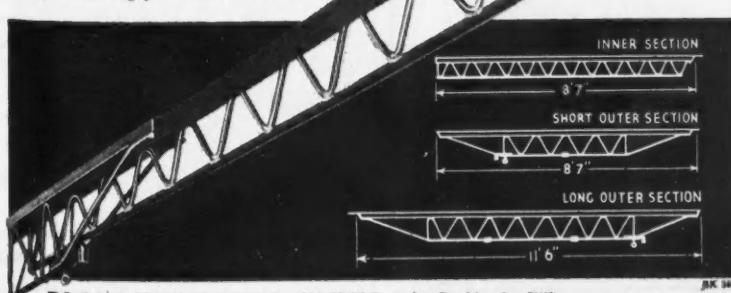
The most economical units
for modern building
construction.



Any span from 8ft. 7in. to 23ft. without propping.
Instantaneous wedge locking of beams.

Built-in camber. Adjustable to meet special conditions.

Compact, strong but light-weight units easily handled by unskilled labour.



BLAW KNOX LTD Box 146 90/94 Brompton Road London SW3

TELEPHONE KENNINGTON 8116

ELECTRICAL EQUIPMENT, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

CYLINDER HEADS—Caterpillar, International, Ruston, Diamond "T," B.M.C., A.E.C., Gardner, etc., perfectly repaired by our special "FUSION WELDING" PROCESS, no matter how badly cracked. Finished, machined, tested, standard. Also Repairs to Crankcases, Sumps, Differentials, etc. Axles, rear and front, reconditioned. Exchange P6, R6, P4 Heads. Established 40 years. Satisfactory guaranteed.—ANGELL AND WILLIAMS LTD. (PECKHAM LTD.), Sumner Road, S.E.15. Telephone: RODnes 3559

FOR HIRE, Two 62-kVA Diesel driven GENERATORS, 400-3-phase, 50 Hz, mounted on 2-wheel trailer. Preferably for a reasonable long hire.—RYE-ARC LTD., Silvertown Works, North Woolwich Road, London, E.16. Tel.: Albert Dock 4381 (10 lines).

J. JOHNSTON AND CO. LTD., for REPAIRS, OVERHAULS and FIELD SERVICE to all types of Contractors' Plant, Mobile Cranes, etc.—Phone Elgar 6905. RAPIER SPARES AND SERVICE, Coronation Road, Park Royal, London, N.W.10.

OFFERS invited for PARTLY DAMAGED 10RB, suitable for spares or rebuilding, with Skinner, Dragline and Backacter Equipment.—FARMER, Old Tilsley and Lovatt, LTD., Engine and Plant Div., Newstead Trading Estate, Trentham, Stoke-on-Trent. Telephone: Trentham 57331 and 57332. Telegrams: "Diesel," Stoke-on-Trent.

DIESEL ENGINES SERVICE EXCHANGE. For Smith Excavators, Ingersoll, C.P.T. and other compressors. Foden and E.R.F. Dumper and Tipper. Muir-Hill and Chasewater Loaders and Dumper. Field service available day and night.

TILSLEY AND LOVATT, LTD., Engine and Plant Division, Stoke-on-Trent.

FOR SALE, 20-ton LOW-LOADER, Dyson Artic. 22-ton and 15-ton models, with a tractor unit. Price £1,000.—ELLIOTT AND SONS (YORK), LTD., 67 Wetherby Road, York. Tel.: York 78220. After hours—York 71194.

TIMBER—RAILWAY SLEEPERS, 8ft. 6in. x 10in. x 5in. WAGON SOLEBARS, 15ft. x 12in. x 5in. SLEEPER POSTS, RAILS and SPARS. Send for detailed price list.—FOSTER AND CO. 8A Eldon Chambers, Wheeler Gate, Nottingham. Telephone 45131.

BRISTOL ANGLEDODZERS AND EQUIPMENT. Immediate SPARES and REPAIR SERVICE for all models.—H. A. SAUNDERS, LTD., Main Distributors, The Butts, Worcester. Telephone 6651.

BALL AND ROLLER BEARINGS FOR ALL CONTRACTORS PLANT



BRITISH & AMERICAN & CONTINENTAL
Any quantity despatched same day.
A.C. BEARINGS
245 KNIGHTSBRIDGE S.W.7
KNI 4277
KEN 9602

FORD D ENGINES
Rebuilt Bench Tested £140
Less Electrics and Pump £95
New Power Major and Sale or Exchange.
BELLS ENGINE SERVICE
HIGHFIELD GARAGE, GREEN LANES,
LONDON, N.21. ENF 0255

CHEAPEST SPARES IN ENGLAND
All Tractor and Commercial
New and Second-hand
Satisfaction Guaranteed
YOU WANT IT, WE HAVE IT
R. M. BUCHANAN AND CO. LTD.,
Linchfield Road, Deeping St. James,
nr. Peterborough.
Ring day or night—Market Deeping 3133

WATER TANK TRAILERS
900 gals. FOR HIRE 450 gals.
Moss (Cambridge) Ltd., 146 Hills Road
Telephone: Cambridge 87519

MECHANICAL ENTERPRISES LTD.,
DORKING ROAD, Gomshall, Surrey.
LAND-ROVERS • DUMPERS, ½ or 1 cu. yd.
CEMENT MIXERS • TIPPERS, 5 or 7 ton
TRACTORS WITH FORE LIFT
TRUCKS, LONG OR SHORT W/B
VANS, 5 cwt.—2 ton

MECHANICAL ENTERPRISES LTD.,
DORKING ROAD, Gomshall, Surrey.
Phone: Shere 204

MATHEW BROTHERS
ARE SO HELPFUL
FOR
DIESEL GENERATING SETS
SALE OR HIRE
YOUR ENQUIRIES WELCOMED



"Matbro" House, Beddington Lane,
Croydon, Surrey.
THOrnton Heath 3402-34

RUSTON POWER TO SERVE YOU
From stock: SERVICE EXCHANGE ENGINES, TYPE VRON, VRONN, VRHN, VQBN, VPHN, VPHN, VPHN.
Full range of ENGINES from 10RB to 54RB Excavators. SERVICE EXCHANGE ENGINES also stocked for Cranes, Locos, Pumps, Power Packs, etc. CHANGEOVERS to EXCAVATORS and other PLANT EQUIPMENT can be made on site by STAFF of competent FIELD ENGINEERS.

TILSLEY AND LOVATT, LTD., Engine and Plant Div., Newstead Trading Estate, Trentham, Stoke-on-Trent. Telephone: Trentham 57331 and 57332. Telegrams: "Diesel," Stoke-on-Trent.

DIESEL ENGINES SERVICE EXCHANGE. For Smith Excavators, Ingersoll, C.P.T. and other compressors. Foden and E.R.F. Dumper and Tipper. Muir-Hill and Chasewater Loaders and Dumper. Field service available day and night.

TILSLEY AND LOVATT, LTD., Engine and Plant Division, Stoke-on-Trent.

FOR SALE, 20-ton LOW-LOADER, Dyson Artic. 22-ton and 15-ton models, with a tractor unit. Price £1,000.—ELLIOTT AND SONS (YORK), LTD., 67 Wetherby Road, York. Tel.: York 78220. After hours—York 71194.

TIMBER—RAILWAY SLEEPERS, 8ft. 6in. x 10in. x 5in. WAGON SOLEBARS, 15ft. x 12in. x 5in. SLEEPER POSTS, RAILS and SPARS. Send for detailed price list.—FOSTER AND CO. 8A Eldon Chambers, Wheeler Gate, Nottingham. Telephone 45131.

BRISTOL ANGLEDODZERS AND EQUIPMENT. Immediate SPARES and REPAIR SERVICE for all models.—H. A. SAUNDERS, LTD., Main Distributors, The Butts, Worcester. Telephone 6651.

CATERPILLAR TRACTOR OWNERS
Can ring AXWORTHY AND COMPANY, LTD., at WINDSOR 60668 for unused Caterpillar SPARES from the large and comprehensive stocks available. Prices are well below list and give substantial savings. Despatch ex stock. Panic service in emergencies.

AXWORTHY AND COMPANY, LTD.,
4 Ouseley Road, Old Windsor, Berks.

FRANK COWLEY

200

DEPENDABLE BUSES AND COACHES FOR
YOUR INSPECTION AND TEST

ALL VEHICLES CAN BE TAXED AT
£12 10 0 PER YEAR

1948 BRISTOL 35-seater Buses, all in first class condition throughout, powered by Gardner 5LW Diesel Engines and 5-speed gearboxes. Certified of fitness 1962-63, fitted with new batteries. These machines are highly recommended, £325 each.

1948 & 49 LEYLAND genuine PS1 32/34-seater Buses, with Leyland PS1 Diesel Engines. All road tested and ready to go to work. £275 each.

1948 A.E.C. 32 and 34-seater Buses, powered by A.E.C. 7.7 Diesel engines, leather-covered Dunlopillo seats. All in first-class condition, £295 each.

1949 BRISTOL 33 - seater Coaches, powered by Gardner SLW Diesels and 5-speed gearboxes. Excellent condition throughout, £350 each.

1947 & 1948 A.E.C. 56 - seater Double-deckers, powered by A.E.C. 7.7 Diesels and 5-speed gearboxes that are in new condition. All these vehicles are in super condition throughout, certified, and carry our full guarantee, £320 each.

Just coming into stock—a very lovely fleet of Bristol Lowbridge 53-seater Double-deckers with bodies in new condition, all powered by Gardner SLW Diesels, fully guaranteed. A few now in stock to choose from, £295 each.

Limited number of Leyland and Guy Double-deckers, carrying full guarantee, £250 each.

Write for latest stock list, also special spare part price list showing saving of 75% on spares.

ALL VEHICLES CARRY OUR THREE

MONTHS' GUARANTEE

WILL TAKE YOUR OLD VEHICLE IN
PART EXCHANGE

FRANK COWLEY

3 Blackfriars Road, Salford, 3

Phone: MANCHESTER BLACKFRIARS 7577
and BLACKFRIARS 1048

PLANT

PLANT FOR SALE

Pritman Cub Mk. V, with Dragline Equipment; Caterpillar 955 TRAXCAVATOR, with Cab and Lights. John Deere 440 CRAWLER, with Schaeff Shovel and Ripper. Caterpillar D4, Models 2T and 6U, with Angledozer. Caterpillar D6, Model 9U, with P.C.U. and Cable Bulldozer. Caterpillar PD4 Trackson PIPELAYER and Angletozer. Caterpillar D7, Model 3T, 9000 Series, with Birtle Angledozer. International BT6G, with Ruston Angledozer. For further details, apply ROBERTSON PLANT, LTD., Barkway (Tel. 277), Herts.

CONTRACTORS' PLANT FOR HIRE
EXCAVATORS, BULLDOZERS, 7-ton DISK ROLLER, 2-ton and 5-ton MOBILE CRANES, MONORAIL TRANSPORTER EQUIPMENT, VIBRATORY PLATES, COMPRESSORS, MIXERS, PUMPS, Plant Dept., WM. TOWNSON AND SONS, LTD., Higher Swan Lane, Bolton. Telephone: Bolton 10149.

FOR SALE, Smith Super 10 EXCAVATOR, No. 19142, complete with Backacter (Norton Bucket), Skimmer (with Universal Bucket) and Dragline equipment. Machine and equipment in excellent condition to be seen working in Leicester area. Price £1,475. Contact LAUGHINGSTON AND DENHAM, LTD., 32 Barkby Thorpe Road, Leicester. Tel. 68558.

A DVERTISER requires Modern 19RB with Shovel. Equipment must be sound machine and well worth money. No dealers, please.—Write Box P.239, "The Contract Journal."

WANTED, Hydraulic BULLDOZER EQUIPMENT for wide gauge D4. — Write Box P.239, "The Contract Journal."

FOR LIMAS

PLANT SALES LTD.,

25 CASTLEREAGH STREET, LONDON, W.1

Telephone: PADdington 2663-4

SHAWNEE POOLE DUMP TRUCKS FOR HIRE

We operate the largest hire fleet of these machines in England; consult us for all your requirements.

Our hire fleet also includes D.8's, D.7's, D.4's with Scrapers, Drott Shovels, Excavators all sizes, and 25-ton Low Loaders.

PLANT HIRE OR CONTRACT

IRVING AINSWORTH (MORLEY) LTD.
MORLEY • Nr. LEEDS
Phone: MORLEY 1800-1-2



EXCAVATORS:
Smith 21 Diesel-driven Excavator, mounted on crawler tracks, fitted any front end equipment, Gardner engine.

Smith Super 10 Diesel-driven Excavator, mounted on crawler tracks, any front end equipment, Gardner engine.

Allen 12/21 Diesel driven Crawler TRENCHER, 12in. wide buckets, Dorman Diesel engine, good condition.

LOADING SHOVELS:
Merton Frontloader, 3/4 cu. yd. capacity, powered by Fordson Diesel engine, all hydraulic, good condition.

Weatherill Model 12H Loading Shovels, powered Fordson Diesel engines, all hydraulic. Choice of three machines.

5-ton capacity Smith, 45St. Jib, 4ft. 8in. gauge, excellent condition.

CRUSHING PLANT:
20in. x 10in. Hadfield Stone Crusher, fitted all cast steel body.

16in. x 10in. Broadbent Crushing and Screening Plant, Diesel driven.

16in. x 9in. Parker Portable Crushing and Screening Plant, Diesel driven.

12in. x 8in. Mars Portable Crushing and Screening Plant, Diesel driven.

20in. x 9in. Baxter Stationary Crusher, overhauled.

12in. x 9in. Parker Stationary Crusher, good condition.

Sturtivant Swing Hammer Swarf Crusher.

HANDLING EQUIPMENT:
2,000lb. capacity Conveyors, Battery/Electric FORKLIFT TRUCK.

2,400lb. capacity Hirst Mk. IIET Battery/Electric FORKLIFT TRUCK.

4,000lb. capacity Jimmy Battery/Electric Pedestrian controlled PALLET TRUCK.

22,000lb. capacity Steelmaster STADDLE CARRIER.

Perkins Diesel engine.

B.S.A. RAILWAY WAGON TRUCK SHUNTING MACHINE.

Reliance 3-wheel LIGHT FACTORY TRACTOR.

GRAVITY ROLLER CONVEYOR:

Standard 8ft. Lengths, rollers 14in. wide x 2 1/4in. x 6in. pitch, unused.

Standard 8ft. Lengths, rollers 18in. wide x 2 1/4in. x 6in. pitch, secondhand.

90 deg. Bends, Stands, Gates, Junctions, Odd Rollers at competitive prices.

LIFTING TACKLE:

Crab Winches, Monkey Winches, Chain Lifts, Pallet-Lifts, Chain Slings, Rope Block.

Crane Skips, Electric Hoisting Blocks.

THOs. W. WARD LTD.,

ALBION WORKS • • • • • SHEFFIELD

'Phone 26311-Ext. 308

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

NEAGRON (CONSTRUCTION), LTD.**OFFER FOR HIRE:**

NEALS QM 4/6-ton capacity MOBILE CRANES, Jibs from 24/60ft. Diesel and hydraulic hydraulics. NEALS 2-ton MOBILE CRANES mounted on pneumatic tyres or crawler tracks. JONES KL44 3/4-ton capacity CRAWLER-MOUNTED CRANES, 24ft. Channel to 40ft. Lattice Jibs, with 10ft. Jury Jib. JONES 1/2-ton capacity CRAWLER-MOUNTED CRANES, with 30ft. and 40ft. Jibs. LORAIN and LORAINE 5/25-ton capacity LORRY-MOUNTED CRANES. LIMA 80t 30-ton capacity CRAWLER-MOUNTED CRANE, fitted 80/100t. Jib with Hitch Gantry. CONCRETE MIXERS 5/3½, 7/5, 10/7, 14/10 and 21/14 cu. ft. capacity. Diesel-powered, high or standard discharge, with internal Weighgear and Hand Scrapers. DUMPER TRAILERS, Diesel, 1½/4½ cu. yd. capacity. COMPRESSORS, Lorry-mounted and Portable, with full equipments. ANT QUEEN Diesel MOBILE HOISTS, 7/10cwt. capacity, rails as required. EXCAVATORS, 10, 15, 19, 24, 33RBs and NCK304 with all equipment. 40ft. HANGING LEADERS for 19RB or 22RB Excavators, complete with all necessary fittings. DROTT and ALLIS-CHALMERS HD5G TRACTOR-SHOVELS. CATERPILLAR and BRISTOL TRACTORS, all sizes. J.C. and DINKUM DIGGERS, ROLLERS, 6½cwt., vibrating, to 10-ton capacity. SHUTTERING, SCAFFOLDING, PROPS, ROAD-FORMS, etc. MONO-RAIL and C.P.O.A.C. CONCRETE PLACER EQUIPMENT.

FURTHER DETAILS:

Abbey House, Victoria Street, London, S.W.1. Telephone: ABBEY 5152 (4 lines).

FOR SALE:

TOWER CRANE, J. Weitz Model G12, complete with Rails and Skips, £700. 2-ton Electric WINCH, with motor, £50. TRENCH SHEETS, 8ft., 3s. per ft. Self-dumping GRAB, Westwood 29/22, £125. P.S. 1000 X 1000, 15. 50. per length. SWIBENCH, 16in. Electric, Universal type, £115. Stothert and Pitt 10/7 CD MIXER, Petrol, £85. AIR COMPRESSORS, SH50 to 600 c.f.m. Petrol, Diesel and Electric. Price on application. Priestman 22/24t HEAVY GRAVEL 2-rod, £100. NEW MOBILE SITE OFFICES, fitted from £350. CRANE SKIPS, 2 cu. ft. to 2 cu. yd. capacity. CONCRETE PLACING SKIPS, 1½ to 2 cu. yd. capacity. Maco PIPELAYING WINCHES, 1-ton to 2-ton capacity. ROAD FORMS, 6in. to 10in. section.

M.E. ENGINEERING, LTD.

457 Finchley Road, London, N.W.3. Telegrams: Mengilmill, London. Phone: HAMstead 7481-2-3. **FOR SALE OR PART EXCHANGE:** Carlisle GRADER, in excellent condition. Also D2 ENGINE, can be seen running. Would consider D7 MACHINE. COALMOOR REFRactories (HORSEHAY), LTD., Lightmoor, Dawley, Salop. Tel.: Ironbridge 2184. **STEEL SHEET PILES AND TRENCH SHEETS** urgently wanted. All sections bought, large and small quantities. Immediate payment.

DUDLEY VALE, LTD.
3 Buckingham Place, London, S.W.1. VICTORIA 0252.

SKIPS FOR SALE OR HIRE

Ring Battersea 9213/4/5

PLANT & BUILDING EQUIPMENT LIMITED

Chatfield Works, 1 Chatfield Rd., Battersea, London, S.W.11.

PLANT HAULAGE OF EVERY DESCRIPTION

LOW LOADING & UTILITY VEHICLES **CATTERMOLES (Transport) LTD.**
79-89 PENTONVILLE ROAD, LONDON, N.1



TERMINUS 1CO1
(7 lines)

ESTABLISHED
OVER
100
YEARS



hire service
CERTAINLY, CONSULT THE SPECIALISTS...

COVENTRY COMPRESSORS LTD

Stewart's Road, Battersea, S.W.8 • Tel: Macaulay 7231 (3 lines)

MOBILE & PORTABLE AIR COMPRESSORS

PNEUMATIC TOOLS

DERRICKS DUMPERS ETC.

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR IMMEDIATE HIRE. KL44 MOBILE CRANES, Jibs up to 50ft. Ruston Diesel LOCOMOTIVE, 2ft. gauge, 25/30-h.p. Delmar Diesel PILE HAMMERS, D5, D12 and D22. 20-ton PORTASILOS. McKlerman TERRICLING HAMMERS, 5, 6, 7 and 9B3. Spuddered Propelled BOILERS, all sizes. ½ Weatherill LOADING SHOVEL. Zenith PILE EXTRACTORS, Nos. 20 and 80. Johnson 1 cu. yd. and 1½ cu. yd. Diesel DUMPERS. TRENCH SHEETING, 10ft. and 12ft. STEEL SHEET PILES, No. 2 section. 10/7 Winget CONCRETE MIXERS, Diesel. DUDLEY VALE, LTD.

3 Buckingham Place, London, S.W.1. VICTORIA 0252.

SURPLUS CONVEYOR BELTS. New, unused and second-hand. Most widths up to 36in. in stock for immediate delivery. Second-hand Belts supplied on sale or return basis.

G. S. VILLIERS (MANUFACT'RY), LTD., 27 Broomtree Road, (Tel. 64436). Glasgow Area: Luggie Bank Road, Kirkintilloch (Tel. 2468). London: 33 St. George's Drive (Tele. 8772). South Wales: 1.F.S Kingsway Trading Estate, Bridgend (Tel. 1567).

NEW PARKER CONCRETE MIXERS. Mini Giant, 4/3 cu. ft., Villiers Petrol Engine. Cash price £68 each. Little Giant, 3½ cu. ft., Lister Diesel Engine. Cash price £173 each. Delivery at once from stock. Deferred or H.P. terms on request.

H. C. HILL, LTD., 68-70 Pengo Road, South Norwood, S.E.25. Telephone: SYDenham 3131-4.

WANTED, DRAGLINE EQUIPMENT or CRANE ATTACHMENT for Priestman Panther Mark IV 1½-yd. bucket, 10-ton counterweight, 10-ton counterweight Gear, 40ft. Jib, Drum, Lagging and Counterweights. WESTERN CONTRACTORS SERVICES, LTD., Hallen Works, Severn Road, Bristol.

CATERPILLAR TRAXCAVATOR, NO. 6, 21yd. Shovel, late 1956, tracks, rollers, sprockets, etc., almost as new. Will take small machine in exchange. £3,650.—FIELDS, Forest Edge, Ringwood Road, Ferndown. Phone: Ferndown 837.

RANSOMES AND RAPIER 410 EXCAVATOR, fitted with Perkins P4 Diesel Engine, Skinner and Backhoe Equipment, in good working order. £550. L. W. VASS, LTD., Amphilill, Bedford. Tel.: Amphilill 3255.

FOR HIRE. Barber-Greene Junior, new 1957 and Barber-Greene Major, new 1959. — FRED. WATKINS (ENGINEERING), LTD., Coleford, Glos.

Rapid expansion has decreed us Greater London's Largest Fleet Owners of
1960 1 yd. "DROTT" SKID SHOVELS



Always available for Hire

Your personal contact: MR. RONALD GENT
Tel: THOrnton Heath 3402/3/4

POWER PLANT HIRE (Beddington) LTD.
Beddington Lane, Croydon, Surrey

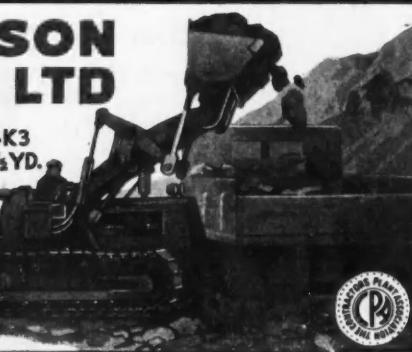
hire it from...
ABELSON

Tel: SHEldon 2424

**Now at WILSON
PLANT HIRE LTD**

DROTT 6K3-14K3
1YD. 2½YD.
SKID-SHOVELS

DEPOT
WEEDON ROAD
NORTHAMPTON
PHONE • 4653 & 4654



MOORE'S

Lincoln 300 amp portable diesel.

**WELDING
SET HIRE**

Tel:
TOTtenham
0401
(10 lines)

VALES PLANT REGISTER FOR IMMEDIATE SALE:

CRANES: NEALS D 1-ton MOBILE, 30ft. Jib, Ruston Engine, 1950, pneumatics, £700. COLES 2-ton MOBILES, 35ft. Jibs, Ruston Engines, 1951/52, pneumatics, £1,150 each.

JONES 2-ton Super 22 MOBILE, 24ft. Jib, pneumatics, Ruston Engine, £775.

JONES KL44 CRAWLER, 24ft. Jib, Ruston Engine, good condition approx. 1953, £1,350.

COLLS 2½-ton Petrol MOBILE, pneumatics, Cantilever, 2½-ton. Cash excellent order, £550. Priestman GRAB to suit, £145.

JONES 3-ton KL33 MOBILE DIESEL, new 1956, 40ft. Jib, on pneumatics, £1,950.

JONES 2-ton KL22 MOBILE DIESEL, new 1955, pneumatics, 24ft. Jib, very good condition, £1,200.

ANDERSON - GRICE 5-ton Two-motor Electric DERRICKS, 100ft. Jibs, new 1947 and 1949, £1,500 and £2,450, respectively.

MORGAN 5-ton Single-motor Electric DERRICK, 80ft. Jib, 1951, 4ft. 8½in. gauge, S.L.I., £2,950.

COLES 6-ton DIESEL MOBILE, 55ft. Cantilever Jib, pneumatics, good working order, £3,425.

BUTTERS 7-ton Electric DERRICK, 120ft. Jib, good condition, £1,750.

TAYLOR-HUBBARD 7½-ton STEAM LOCO., 50ft. Jib, 1951, 4ft. 8½in. gauge, S.L.I., £2,950.

BUTTER 5-ton Steam DERRICK, 120ft. Jib, on bogies, £5,350.

NEALS QM 4/6-ton MOBILE, Soft. Jib, Ruston Engine, pneumatics, overhauled recently, £2,850.

ANDERSON 10-ton Steam DERRICK, 120ft. Jib, good condition, £3,000.

COLES 10-ton Electric DERRICK, 120ft. Jibs, self-propelled, both overhauled, £3,750 each.

COLES 12½-ton MOBILE, Soft. Jib, Perkins Engine, pneumatics, 1950, £5,000.

MORGAN 15-ton Steam DERRICK, 120ft. Jib, new 1958, on bogies, £8,750.

HENDERSON 15-ton Electric DERRICK, 110ft. Jib, new 1951, very good condition, £6,250.

EVEREST T12 All-Electric TOWER CRANE, will lift 3 tons at 21ft. radius at 101ft. height, with various extras, used 18 months only, £2,650.

COLES 40-ton LORRY-MOUNTED, 130ft. Jib, plus 25ft. Fly, new 1954, very good order. Offers.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE—SEND FOR VALES FREE PLANT REGISTER.

Further details: 14 Lower Grosvenor Place, London, S.W.1. VICTORIA 7531, 3501, 8080, 9888 (15 lines).

WANTED, FORWARD SHOVEL for 10RB. Write Box P.2404, "The Contract Journal."

FOR HIRE AND SALE

Drott Skid Shovels with 4 In 1 Bucket.

Compressors 2 to 12 Tools.

Vibrating Rollers, Crane Skips.

Platform Hoists, Scaffold Jib Cranes.

Concrete Mixers, 4/3 to 14/10 cu. ft.

Diesel Driven Pumps.

Diesel Welding Plants.

**JOSEPH THOMPSON & Co.
(Liverpool) Ltd.**

Dutton Street, Liverpool, 3.
Central 0820 & 3023

MODERN PLANT FOR HIRE, with experienced operators and backed by an efficient service organisation:

EXCAVATORS, 1½, 2½ and 3 cu. yds.

L.C.V. DUMBERS, 1 to 4 cu. yds., Diesel.

ROAD ROLLERS, 1 to 12 tons.

COMPRESSORS—Mobile and Portable, with every type of equipment.

Chassis SHOVELS, ½ to 1 cu. yd.

ANGLO-SCOTTISH DOZERS, 1½-ton and Fowler.

CONCRETE MIXERS, 5½ to 14/10 cu. ft.

PUMPS, 1½-in. to 6-in. Diesel.

Earth Rammers, Hoists, Cranes, Mortar Pans, Kangoo Hammers, Roadforms, Traffic Lights, Scaffolding, and most types of Contractors' Plant.

HUBERT C. LEACH, LTD., 131 High Street, Cheshunt, Herts.

Tel: Waltham Cross 25161 (5 lines).

SOUTHERN BUILDERS AND CONTRACTORS (LONDON) LTD. FOR HIRE:

19RBs, D7s, D4s, and Dozers/Scrapers, Drotts 4-in-1 and all Contractors' Plant at very competitive rates.

FOR SALE: Jules Weltz G25 Electric Travelling 3-ton TOWER CRANE. Complete as new. Well under list price.

David Brown 1yd. OVERLOADER, on crawlers. Little used.

David Brown Model TD50 Hydraulic DOZER. Condition excellent.

Write or 'phone: Cranleigh, The Drive, Rickmansworth 2878 or 5235.

ROAD ROLLERS.—Marshall 8/10-ton Diesel, with 2-tine Scarifier, Aveling-Barford 8-ton Diesel.

Ditto 50cwt., with Ruston Diesel Engine. Ditto 37cwt., with J.A.P. engine. Greens 30cwt., 1954, with Victor petrol engine. Vibrosoil Compactor, 1957, J.A.P. engine, 12cwt. Force 4½-ton.—A. M. COLE, Eastgate, Sleaford, Lincs. Tel. 463.

DELMAG DIESE PILE HAMMERS FOR HIRE. Our fleet of these fine machines is the biggest in Britain. Models D5, D12 and D22 available with rope suspended leaders and leg guides, suitable for driving any section of pile.

DUDLEY VALE, LTD. 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

FOR HIRE: New 4-in-1 Drott SKID-SHOVELS;

10RBs: 8-ton and 10-ton ROAD ROLLERS, and 3yd.

DUMPERS: Fleet of Tipper Lorries. Attractive rates.

CORNEIL AND CO., Manchester. Tel: STOckport 7214.

ERNEST DOE AND SONS, LTD.

Have the following NEW MACHINES on show:

J.C.B. 4 Hydraulic EXCAVATOR and Loading Shovel.

John Deere 831 CRAWLER LOADING SHOVEL.

Shawnee Poole Model 7 REAR DUMP.

County CD50 Hydraulic ANGLEDOZER.

Thwaites Nimbus DUMPER.

J.C.B. Hydra-Digga Hydraulic EXCAVATOR at special price.

Tunny 2-ton MOBILE CRANE.

Bray BL430T 4-wheel drive Hydraulic LOADING SHOVEL with torque converter.

Track-Marshall ANGLEDOZER.

Demonstrations on your own site gladly arranged.

We can give quick delivery on the J.C.B. 4, and immediate delivery ex stock on most of the others.

Spares and Service ex Stockton for all these machines.

ERNEST DOE AND SONS, LTD., Therapia Lane, Mitcham Road, Croydon, London.

Telephone: Thornton Heath 4844 (day and night).

KINGSTON PLANT HANWORTH • MIDDX.

FOR DROTT 4 IN 1 AND

ALL PLANT HIRE

FELTHAM 4084

PUMPING WATER?

you need a

MUD MARVEL

BUY OR HIRE from the sole makers W.G. SEARCH LTD. WHITEHALL RD. LEEDS, 12.

Lincoln 300 amp portable diesel.

Tel: TOTtenham 0401 (10 lines).

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

S A L E O F B U I L D E R S ' H O I S T S .
S A L E O F M I D G E T S C A F F O L D C R A N E S , complete, four
at £85 each.
Ace Mastermobile 10cwt. Diesel MOBILE PLATFORM
HOIST, £175.
Ace Comet 10cwt. Diesel MOBILE PLATFORM HOIST,
£225.
All fully tested and certified. Hire Purchase available.
Full range of new BUILDERS' HOISTS, in stock.
WILLIAM R. SELWOOD, LTD.,
Chandler's Ford, Hants. Telephone 2981.

F O R S A L E O R H I R E .
Bristol OVERLOADERS and BULLDOZERS, new
and reconditioned.
Barford DUMPERS and MIXERS.
Portsmouth Diesel COMPRESSORS.
C. AND A. PLANT SERVICES LTD., 202-212 Heald
Grove, Rusholme, Manchester, 14. Tel.: RUS. 7291.

N A R R O W T R E N C H B U C K E T S to fit all
machines. SALE or HIRE. The Norton Backacter
Bucket designed by user digs harder material and
amplifies more efficiently. Sizes 1ft. 6in./2ft. 4in.
I M M E D I A T E D E L I V E R Y . Other sizes within 10 days.
Contact **NORTON PLANT HIRE, LTD.**, Ramsden,
Bury, Essex. Tel.: Ramsden Heath 365/6.

C R A N E H I R E in the South-west: Latest type
Mobile and crawler Machines. Max. lift 1/2 tons.
Hire from 70/- per day or 60/- per hr. Fly Jib. Hire
or Contract.—**GRANGE PLANT LTD.**, Honiton, Devon.
Telephone: Broadhembury 330-355.

P I L I N G for SALE. Appleby-Frodingham No. 3
and Larsen No. 3.—**ROADS AND RUNWAYS**,
20 Victoria Street, London, S.W.1. Tel.: Abber 4905.

W A N T E D . Ingersoll-Rand K105 COMPRESSORS,
any condition.—**E.C.P.H., LTD.**, 146 Hills Road,
Cambridge.

F O R H I R E O F M O D E R N D I E S E L
C O M P R E S S O R S
IN THE MIDLANDS
J. W. COX PLANT HIRE LTD.
QUARRY BANK, BRIERLEY HILL, STAFFS.
Phone: CRADLEY 66695

NEAL'S (PLANT HIRE) LTD.
SERVE THE SOUTH
Immediately available for hire on the
South Coast:—
Excavators, Tracto-Shovels,
Mobile Compressors,
Fergusons, Mobile Cranes,
10 BD 3.c.y. Diesel Dumpers,
Petrol and Diesel Rollers,
Concrete Mixers, etc., etc.
All enquiries promptly dealt with
Phone - Chichester 3777-8-9

TOWER CRANES
FOR HIRE

BUILDMASTER MODEL 29
ROTARY TOWER CRANE

having the following duties:—

3½ tons @ 23ft. radius 136ft. high
1½ tons @ 46ft. radius 124ft. 9in. high
1½ tons @ 65ft. 6in. radius 89ft. 9in. high

BUILDMASTER MODEL 42
ROTARY TOWER CRANE

having the following duties:—

3½ tons @ 31 ft. radius 178 ft. high
2 tons @ 65 ft. 6 in. radius 155 ft. high
1½ tons @ 88 ft. 6 in. radius 117 ft. high

ABELSON & CO. (Engineers) LTD.
Coventry Road, Sheldon, Birmingham
Telephone: SHELDON 2424
and at LONDON and MANCHESTER

F O R S A L E .
Cleveland 95 TRENCHER, fitted with 12in. width, brand new Ford Diesel Engine, completely overhauled, painted and in excellent condition throughout. £2,750.
Smiths 10-ton EXCAVATOR, manufactured 1956, with Skimmer and Backacter Equipment and brand new 24in. Universal Skimmer/Backacter Bucket. £2,500.
Whitlock Dinkum DIGGER Major EXCAVATOR and POWER SHOVEL. Demonstration machine 6 months old, fitted with Power Steering. Twin Rams to Front Shovel, and 24in. Excavating Bucket. Only worked approx. 60 hours and in "as new" condition. £2,000. These machines can be inspected any time in Leicester.
GROCOCK ALUMINIUM (PLANT HIRE), LTD., Mayfield Road, Leicester. Telephone: 36148 (3 lines).

F O R S A L E . Atlas PORTABLE COMPRESSOR, Model 22SP, 22 cfm. at 100 p.s.i., Petrol 56 Diesel Engine, electric starting, mounted on four pneumatic wheels. New late 1956. Overhauled and in excellent order throughout.—C. V. BUCHAN LTD., Victoria Road, Burgess Hill, Sussex.

T A N D E M R O L L E R, 7/9-ton Aveling-Barford, year 1955, excellent condition, £1,775.—GENERAL ROADWORK, LTD., 616 Mitcham Road, Croydon, Surrey. Telephone: Thornton Heath 6898.

W A N T E D T O P U R C H A S E .
19RB and 22RB EXCAVATORS, in good order.
DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

F O R H I R E . COMPRESSORS of all types.
DUMPERS, Etc.
MILES, Cowburn Street, Heywood (6856), Lancs.

W E I G H B R I D G E
Road and Rail, Pooley, weighing capacity 40 tons, N.L.W. Steelyard Indicator, weightable 20ft. x 8ft.
Further details from:
E. G. SHERING AND CO.,
20 Victoria Street, Edinburgh.
Telephone: CALEDONIAN 6921.

CONVEYORS for HIRE

Does your problem involve the movement of bulk materials? We specialise in the HIRE OF HANDLING EQUIPMENT and offer a comprehensive range of plant at attractive daily or weekly rates to suit your convenience.

Please write or telephone:—

SUTCLIFFE PLANT HIRE LTD
14a Bond Street, Wakefield
Tel: Wakefield 6433

GAZEWAY

PLANT FOR SALE

15/20 A.E.C. UNIT, Tasker LOW-LOADER TRAILER, k.o. rear, works reconditioned engine. First-class order, £1,050.
10B Muir-Hill DUMPER, reconditioned May, 1960, new tyres, Perkins L4, £375.
10B Muir-Hill DUMPER, reconditioned June, 1960, new tyres, Perkins P6, £385.
500 c.f.m. COMPRESSOR, C.P.T., Ruston VRH, on pneumatics. Good order, £1,075.
1½yd. Benford Diesel DUMPERS, MK111. Good order, £125 each.
18/12 Benford MIXER, Weighgear and Shovel, £600.
2 cu. yd. A.E.C. TIPPER, alloy body, first registered August, 1957, £1,400.
Warry HOIST, Petrol, complete with Extension, on pneumatics, £50.
50cwt. Diesel ROLLER, water tank and sprinklers. Very little used, £400.
4½-gallon JERRICAN filled HD50 OIL, new, suitable crankcase and rollers, 17/6 per can.
19RB BACK BALANCE WEIGHTS, £75 each.
Westwood Self-dumping GRAB, 43/47, unused, £150.
Atlas ROCK DRILLS, little used, £5.
Onions 9yd. SCRAPER, good tyres. In sound condition, £675.
LOW-LOADER JACKS, complete steel handles, 12-ton capacity, £95 each.
300-gallon Coal-fired BOILER, unused, complete with Pump and Gantry, £95.

GAZEWAY PLANT HIRE LTD.
Windmill Lane, Thames Ditton, Surrey.
Tel: EMBERBROOK 2800/1 and 5511
(night 6147).

MOORE'S HOIST
Ace Comet mobile and Midget scaffold.

Tel:
TOTtenham
0401
(10 lines)

J. J. JOHNSTON AND COMPANY, LTD.
OFFER FOR HIRE:
Neals QM 4/6-ton capacity Mobile CRANES, 24/40ft.
lbs. heavy-duty tyres.
Jones KL44 Mobile CRANE, 30/40ft. Jib, pneumatics.
Rapier 5-, 6- and 7½-ton capacity MOBILE CRANES.
Miles 15cwt. capacity MOBILE CRANE.
Juliette Weitz GISHVA TOWER CRANE.
Drott 1 cu. yd. Tractor SHOVELS.
Rapier 3 cu. yd. Crawler-mounted EXCAVATORS.
all equipments.
DUMPERS, 15cwt. and 22½cwt. capacity.
COMBINESSORS, 2- and 4-tool, portable and lorry mounted.
CONCRETE MIXERS, 5/3½ to 14/10 cu. ft. capacity.
SWING WEIGHBATCHERS, 14 cu. ft. Double Bucket.
Rapier Centrifugal PUMPS, 2in. to 4in.
Wickham Diaphragm PUMPS, 3in. and 4in.
Stothert & Pitt Vibratory ROLLERS.
271 Uxbridge Road, London, W.12.
Tel.: Shepherds Bush 6941.

F O R S A L E . 120 tons Appleby-Frodingham No. 2 Section STEEL SHEET FILES, lengths 38ft. Excellent condition.
DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.
MOBILE CRANES for SALE, HIRE and SPARES.
M Coles, Ransomes, Morris, etc.—**ROBERT DIXON LTD.**, Authorised Enclines Repairs, Hunston, Herts. Tel.: Stansted Ahntis 3013.

F O R H I R E I N T H E M I D L A N D S . 10-ton Lorry mounted CRANES, jibs to 75ft.—**L. NELSON AND CO., LTD.**, Lugtrout Lane, Solihull, Warwickshire. Telephone: Sheldon 4005.

F O R S A L E . New J.C.B., unused, £300 off list price.
PLANT HIRE (GROVE), LTD., 6 Church Street, Wantage, Berks.

FOR HIRE

Modern Shovels, Excavators, Tippers

Keen rates quoted for Site Clearance and Excavation at all-in rates
All Road and Building aggregates supplied

R. BARKER (Peckham) LTD.,
10a Ellery Street, Peckham, S.E.15
NEW CROSS 3337 PITS—BRASSED 586

ERNEST DOE & SONS LTD.

Uiting, Maldon, Essex

ROTARY HOE TRENCHER, with Ford 4D Diesel Engine, good order. £850
Chase-side LOADING SHOVEL, powered by Ford Diesel Engine, overhauled. £450
DINKUM DIGGER, with Skyhi Front Loader, seen working. £575
Trusty 1-ton Diesel DUMPER, working order. £125
Tobacco SCRAPER, £275
Chase-side LOADING SHOVEL, with P6 Engine, very good trim. £235
Bray HL20 3½ cu. yd. Hydraulic LOADING SHOVEL, crowd action. £650
May, 1957, DINKUM DIGGER, with Dora-loader, perfect. £1,250
DINKUM DIGGER ATTACHMENT for 1-ton Dumper. £100
Major. As seen working. £625
COUNTY CRAWLER, with Bray Dozer, very order. £550
DINKUM DIGGER, with Dozaloids, overhauled. £1,000
Arpe TRENCH DEVIL, self-propelled Trencher. £475
Ferguson TRACTOR, with Shawnee Scout Digger and Front Shovel. £650
ROTARY HOE TRENCHER, 4D Diesel Engine, overhauled throughout. £1,150
L.C.B. EXCAVATOR, with hydraulics, pneumatics, Front Shovel. £650
Bray Hydraulic LOADING SHOVEL, 3½ cu. yd. Bucket. Seen working. £650
MOTOR RAIL DUMPER SPARES, including Dorman Diesel Engine, Goliath, cheap. £650
1955 Bray BL430, 4-wheel-drive LOADING SHOVEL, Immediate delivery. £1,750
1955 Bray HL20, 1 cu. yd. Crawling LOADING SHOVEL, rebuilt at cost of over £800. For quick sale. £6,250
Several Fordson Major DIESEL TRACTORS, Prices from £225
Ford Major DIESEL, with Skyhi Hydraulic Loader, overhauled. £450
International 78 Crawler TRACTOR, useful site tug tractor. £1,150
Oliver LOADING ARCH, on Tracks. £225
Wing 3½-ton CONCRETE MIXER. £645
Drayton 1-ton DUMPER, with new Petter Diesel Engine. £950
Leed-Howlett DITCHER, powered by Fordson Major Diesel. £450
Fiat 550 DOZER, complete, good Tracks, etc. engine overhauled. £1,250
Fiat 550 BOGMASTER, with Dozer. A real swans tractor. £550
Send for complete list giving full details and H.P. terms.

ERNEST DOE & SONS LTD.

Uiting, Maldon, Essex

Telephone: Hatfield Peverell 311 (Night 319).

★ Further Classified Plant Advertisements on pages 473-480

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR HIRE and SALE: ARMSTRONG-WHITWORTH PNEUMATIC POKER-TYPE CONCRETE VIBRATORS.

We are distributors for all types of Armstrong-Whitworth Pneumatic CONTRACTORS' TOOLS. Including Concrete Breakers, Light Picks, Clay Diggers, Rock Drills, Pumps, Backfill Rammers and Tamers, Hoses and Accessories. We hold a large stock of Spares and can give a 48-hour repair service. New and Second-hand Air Pumps COMPRESSORS for SALE. Send for list.

HUBERT C. LEACH, LTD., 131 High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

FOR SALE: 15c. DIGGER, on Major Diesel, Cab, two Buckets. 1956. £650.

DINKUM DIGGER, Skyhi Front Shovel, two Buckets, Blade. £595.

DINKUM MAJOR, 1958, with Power Shovel, Cab, two Buckets. £1,600.

WILLIAM R. SELWOOD, LTD., Chandler's Ford, Hants. Phone 2981.

WELDING PLANT FOR HIRE.

Also:
COMPRESSORS.
MOBILE CRANES.
LIGHTING PLANTS.

RYE-ARC, LTD., Plant Hire Division, Silvertown Works, North Woolwich Road, London, E.16. Phone: ALBERT Dock 4381 (10 lines).

FOR SALE: No. 1 DINKUM DIGGER, Mk. III, No. 494, mounted on a Fordson Major Diesel Tractor, with Skyhi 3 $\frac{1}{2}$ cu. yd. Forward Shovel and 18in. and 24in. Excavator Buckets, in good working order. Lying Birmingham, can be seen on appointment. Telephone Aston Cross 2865.

FOR SALE, DRAGLINES: 1201 Limes, Marion 111M; 1500 Euclid; Trax-Marshall TRACTORS, fitted Angledozer blade available from: CURRAL, LEWIS AND MARTIN, LTD., 11 Booth St., Birmingham, 21.

WANTED — WANTED — WANTED: Caterpillar 463 SCRAPPERS, Birtley 80s. Good prices paid. Write Box A.A.395. "The Contract Journal."

FOR SALE: 150-h.p. Fowler Diesel MECHANICAL SHUNTING LOCOMOTIVE, new 1940, 4ft. 8 $\frac{1}{2}$ in. gauge. Price £2,250.— F. BURRILL AND CO., 235A Cathedral Road, Cardiff. Telephone 26100.

**DROTT 4-IN-1 SKID SHOVELS
FOR HIRE.**

RING AXWORTHY AT WINDSOR 60668.

**FOR
HIRE**

CONTRACTORS'
PLANT
AND LOW
LOADING
VEHICLES
OF ALL TYPES
AND SIZES

A.E.FARR (Plant Hire) LTD

WESTBURY · WILTS · Tel: 956 (5 lines)

MATHEW BROTHERS OFFER FOR SALE: Broomwade SV1 Portable Diesel COMPRESSOR, powered by JP3 Diesel Engine, mounted on four pneumatic tyres. Price ex works £195.

Four Broomwade SV3 Portable Diesel COMPRESSORS, powered by Meadows 6-cyl. Diesel Engine. Three mounted on solid rubber tyres, one on pneumatics. Price (each) ex works £495. Two 1949, powered by G.M. 3/71 Diesel Engines. One fitted with Dragline equipment and the other with Face Shovel equipment. Price (each) as and where lying Yorkshire £1,650.

Ruston-Bucyrus 22RB EXCAVATOR, 1400 Series, powered by Ruston Diesel Engine, fitted with either Dragline or Face Shovel equipment. Price as and where lying Yorkshire £3,250.

Allis-Chalmers 155C Tractor SHOVEL, manufactured 1955. 1 $\frac{1}{2}$ cu. yd. Bucket. Price as and where lying London. £1,475.

Winget 21/14 CONCRETE MIXER, Type EM21, standard discharge, powered by Diesel engine. Price as and where lying London £250.

Many Compressors and Diesel Generators available from stock.

Write or 'phone: Matbro House, Beddington Lane, Croydon, Surrey. Thornton Heath 3402.

STEEL SHEET PILES and TRENCH SHEETS urgently WANTED. All sections bought: large and small quantities. Immediate payment.

DUDLEY VALE, LTD.

3 Buckingham Place, London, S.W.1. Victoria 0252.

FOR SALE, DINKUM DIGGERS: In good working order, from £550. For further details from GROCOC AND DAY (PLANT HIRE) LTD., Mayfield Road, Leicester. Tel.: Leicester 58148.

FOR SALE or HIRE: Latest type AIR LOCKS, L.P. COMPRESSORS and MEDICAL LOCK for oxygen sinking.—A. E. FARR (PLANT HIRE), LTD., Westbury, Wilts. Tel. 273.

FOR SALE: New 8cu. yds. Green Griffin Vibrating ROLLERS. Immediate delivery. WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel: 639081 (10 lines).

WANTED: TD18, TD19, TD20 or Challenger 33, with Angledozening Equipment. Please send the details and price required to Box P.2313. "The Contract Journal."

BATCHING PLANT FOR SALE

Available now, 1 cu. yd. Blaw Knox Batching Plant. 80-ton 3-compartment storage. 60-ton Single Ring Cement Silo. Conveyor, Cement Blowing Unit and 7-ton Hopper Unit with Air Slides and Pressure Cylinders. Cement Weigh Hopper with valve-operating gear mounted in frame. All-Electric. Used on one contract only.

DEW - CONTRACTORS - OLDHAM

MAIN 5631

FOR IMMEDIATE HIRE

977 Traxcavator HT4 Traxcavator
831 John Deere Lanz Loading Shovel
Excavators D4 Dozers Mixers
Vibrating Rollers Road Rollers
Compressors Hoists

PLANT HIRE & SALES, LTD.
MILLBROOK POINT ROAD
SOUTHAMPTON

Telephone: Southampton 75271

SLOGGETTS PLANT HIRE. — For COMPRESSORS; TRACTORS; DINKUM DIGGERS; DOZERS; CALF-DOZERS; CRANES; ROAD ROLLERS; FLOOR CENTRES; AGITORS; PUGSLEY; SPREADERS; MOBILE SITE OFFICES; PUMPS; HOISTS; 8/15cu. yds. ROADFORMS. Sin. to 10in. Light and Heavy Section. All CONTRACTORS' PLANT, long or short HIRE. — 2 Burtons Road, Hampton Hill, Middlesex. Tel.: Teddington Lock 1138/9.

FOR SALE: Kue Ken No. 57 (24in. x 15in.) Jaw type STONE CRUSHER, reconditioned by makers, Broadhurst 2177/8. Blake type Double-toggle STONE CRUSHER. Broadhurst 16in. x 9in. DITTO. JOSEPH PUGSLEY AND SONS, LTD., Bristol, 5. Tel.: Bristol 56037.

WORKING In the Lancashire and Cheshire areas! Woolfenden's are your MOBILE CRANE people. Light or heavy. Lorain, Michigan, Quick-Way, Neals. 1lb lengths to 1000ft.

WOOLFENDEN'S. Anfield, Liverpool, 4. Stoneycroft 3755.

FOR SALE: 2-Tool Broomwade COMPRESSOR, with Lister Diesel Engine, four pneumatic wheels and towbar. Bargain. £250.

DUDLEY VALE, LTD. 3 Buckingham Place, London, S.W.1. Victoria 0252.

IF YOU WANT to PURCHASE or HIRE any CONTRACTORS' PLANT, please get in touch with METAL UNION (PLANT), LTD., 75 Victoria Street, London, S.W.1. Telephone: Victoria 4868/9, 7429, 2177/8.

FOR HIRE in Leicestershire and adjacent counties: Coles and Hydrocon MOBILE CRANES and J.C.B. EXCAVATORS.—CREESE PLANT HIRE, Thurmaston, Leicester. System 2932/3.

FOR SALE: Onions 9 cu. yd. Type EK9 SCRAPER, in good condition. £500 o.n.o. — Write Box P.2403. "The Contract Journal."

DINKUM MAJOR, new June, 1958. 3 $\frac{1}{2}$ yd. Shovel, 24in. Bucket, power steering. Offers invited. JOHNSON, 609 Walsall Road, Birmingham, 22A.

WANTED, CABLEDOZER for 67 T.M. Condition Immaterial. — S. C. STACEY AND SONS, Lawn Lane, Springfield, Chelmsford. Broomfield 340.

ROAD ROLLERS

FOR HIRE OR SALE
10 CWTS. to 10 TONS
with or without drivers

HALTRAC LIMITED

Bourne Works, Walmer St., S.W.15.
PUTney 4185

QUICKS of CHEADLE

Offer immediate
delivery of NEW
and USED industrial
machinery
(Offered subject to being unsold)

New CD50 County Crawler Diesel Angledozer, standard equipment, electric lights, 14in. tracks, disc clutches.

New Brayloader BL25 Crawler/Loader, standard equipment, 13in. Borg and Beck clutch, cab, windscreen wiper, disc slewing clutches, 1 cu. yd. Bucket, complete with teeth.

1955 Mk. 3 County Crawler Diesel Angledozer. Undergoing complete overhaul.

1953 Fordson Major Diesel Tractor, with Skyhi Ardua fitted, 1 $\frac{1}{2}$ cu. yd. Bucket. Reconditioned engine. Fully repaired and repainted.

1958 J.C.B. Hydra/Loadall 55, modified to 11037. Genuine 1,810 hours. 14 x 30 rears, 750 x 16 front. 24in.-28in. Backacter Bucket.

H. & J. QUICK LTD.,
WILMSLOW ROAD, CHEADLE, CHES.
Telephone: MERCury 2345.

**Ernest Doe
ULTING MALDON ESSEX**

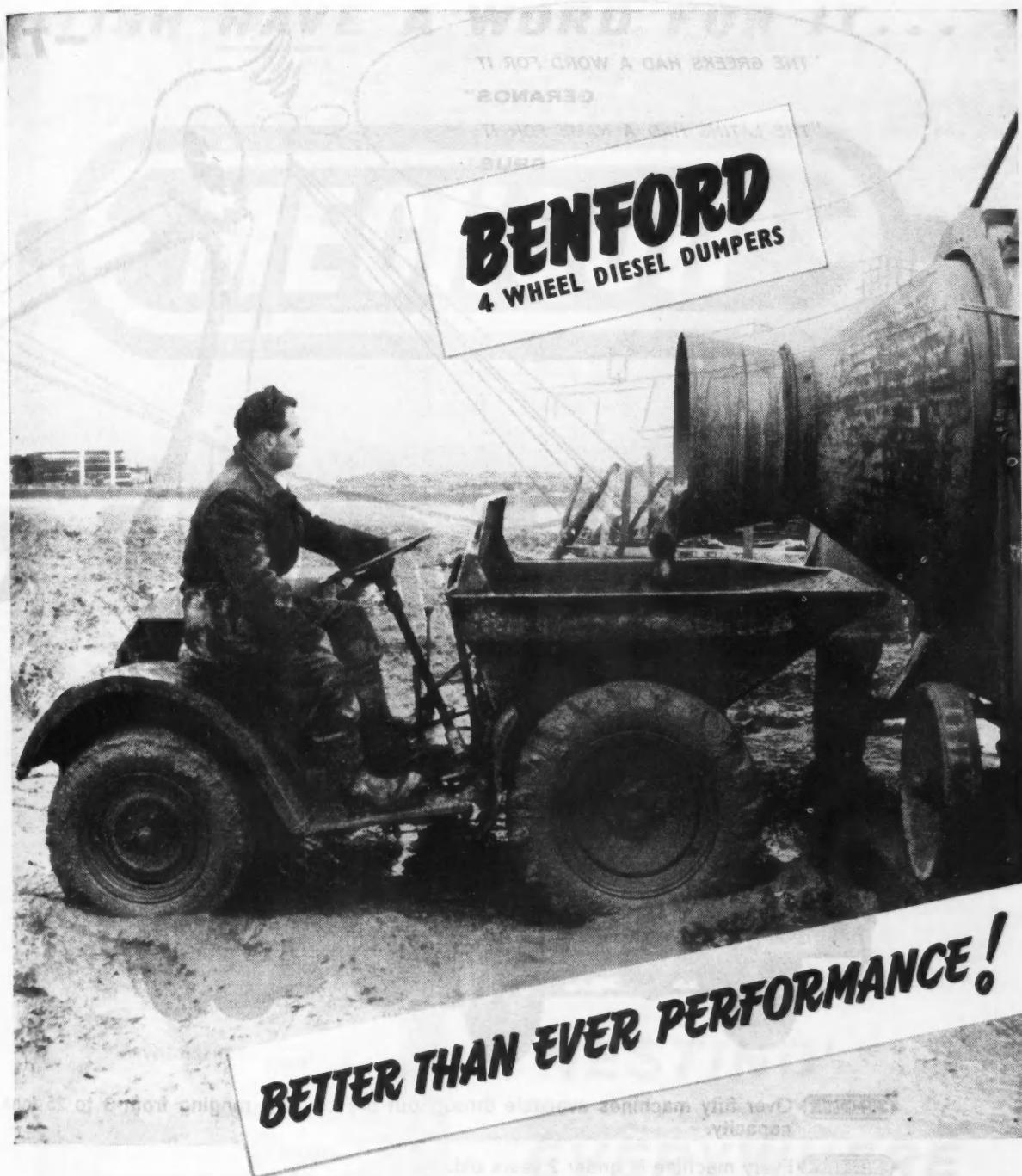
Telephone:
HATFIELD PEVEREL 311
(Night 319)

TRADE SUPPLIED
SALES SPARES

SOLE DISTRIBUTORS IN 11 COUNTIES

JCB

SERVICE



IMPROVED TRACTION & WEIGHT DISTRIBUTION ON ALL MODELS!

Benford Dumpers are now better than ever before — yet cost no more! Improved traction and weight distribution on all models have given them a better than ever performance.

For full details please write for our new catalogue and price list No. 6017

15 cwt. capacity — MARK 3
Water level 12 cu.ft. Struck level 15½ cu.ft.
Heaped 18 cu. ft. Skip loading height 39".

£330 Cash Price or **£33** down and 12 equal monthly payments of £26.49

22½ cwt. capacity — MARK 7
Water level 18 cu. ft. Struck level 22½ cu. ft.
Heaped 27 cu. ft. Skip loading height 41".

£459 Cash Price or **£46** down and 12 equal monthly payments of £36.98

30 cwt. capacity — MARK 12/30
Water level 24 cu. ft. Struck level 27 cu. ft.
Heaped 36 cu. ft. Skip loading height 44".

£615 Cash Price or **£62** down and 12 equal monthly payments of £48.17.0

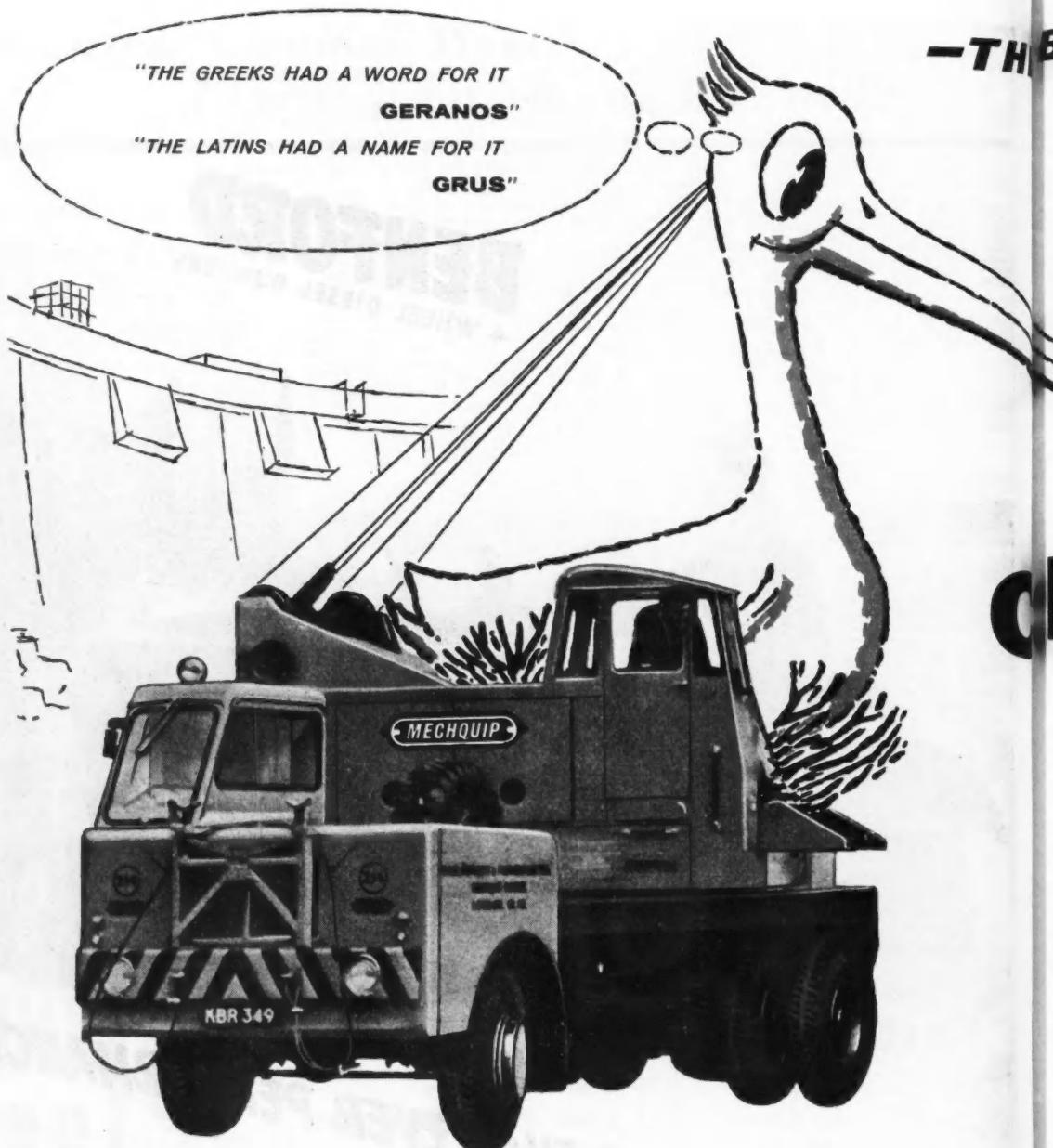
DELIVERY FROM STOCK — CARRIAGE PAID IN ENGLAND AND WALES

BENFORD LTD.

THE CAPE • WARWICK • Telephone: WARWICK 1170

BENFORD





MECHQUIP Over fifty machines available throughout the country, ranging from 3 to 25 tons capacity.

MECHQUIP Every machine is under 2 years old.

MECHQUIP All machines are operated by efficient and qualified drivers.

WOOD PRITCHETT & PARTNERS LTD

MECHQUIP HOUSE · GOLDHAWK ROAD · LONDON · W12

Telephone: SHEpherds Bush 4406 (3 lines)

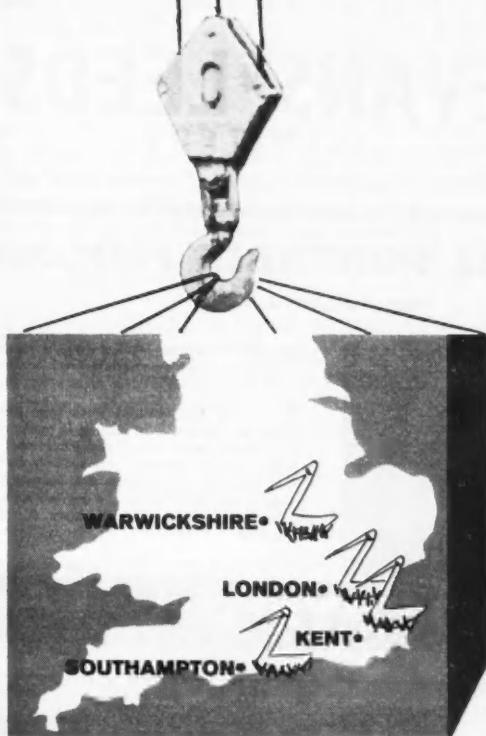
Telegrams: Mechquip London

MEMBERS OF THE LORRY MOUNTED CRANE ASSOCIATION

TH BRITISH HAVE A WORD FOR IT...

MECHQUIP

CRANE HIRE



MECHQUIP

CRANES

NOW

'NESTING'

EVERYWHERE

MIDLANDS

MECHQUIP CRANE DEPOT
SOUTHAM ROAD
DUNCHURCH · WARWICKSHIRE
Telephone: Dunchurch 319

SOUTHAMPTON

MECHQUIP CRANE DEPOT
BISHOPS WALTHAM
SOUTHAMPTON
Telephone: Bishops Waltham 447

KENT

MECHQUIP CRANE DEPOT
ROCHESTER WAY
DARTFORD HEATH
KENT

Telephone GRA 3401-3

ARTHUR FOSTER [EAST HAM] LTD.
STEVENAGE ROAD, EAST HAM, E.6

**FOR HIRE—ERCTION
PLANT AND TACKLE TO
LIFT UP 100 TONS**



The Alborough nationwide reputation has been built on Service (not only supply) . . . Service which saves our customers time and money in planning and erection.

Alborough

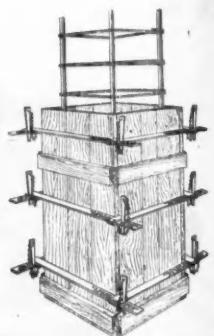
THE Alborough SERVICES SAVE YOU TIME & MONEY!

Consider the savings you can make, for example, on an Alborough Prefabricated Concrete Garage or Coal Bunker. Both combine compactness, strength and durability with neat, unobtrusive appearance. And both — like all Alborough Prefabricated Concrete outbuildings — ask for the lowest cost for the most and the longest service. Send for illustrated leaflets and details of our Complete Erection Service within 75 miles of London.

A.B.C.D. (Raynes Park) Ltd.
34/35 Alpha Road, Surbiton, Surrey.
Tel: ELMbridge 6591/3



COLUMN CLAMPS



These column clamps are all adjustable to columns of different dimensions. Manufactured from high-grade steel, they are indispensable to temporary shuttering and casings.

SALE • HIRE

Sizes to suit columns from 10" to 4' 6"

All Plant Fully Guaranteed to meet our Specification

The finest on the market today—and the keenest prices in the field

Full details from the actual Manufacturers :- **AUDAX**
CENTRAL AVENUE, WEST MOLESEY, SURREY Tel: Molesey 6071 (5 lines)

CLOSING DOWN SALE

Tractors and other equipments not available at our last sale and recently released from hire contracts are now offered for immediate delivery.

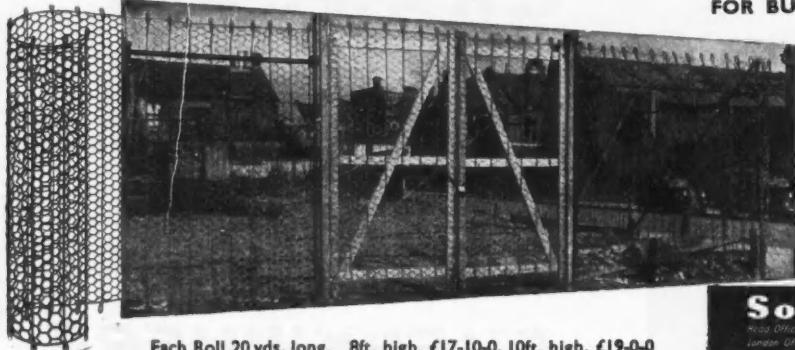
In order to effect quick clearance of our remaining stock we will sell at very attractive prices and will not refuse any reasonable bid.

EVANS OF LEEDS (LIMITED)

WATERLOO LANE, BRAMLEY, LEEDS 13. Telephone: PUDSEY 4005

THE SOMMERFELD TRACK type PORTABLE FENCING

FOR BUILDING SITES



Each Roll 20 yds. long. 8ft. high, £17-10-0, 10ft. high, £19-0-0

Most Contractors are familiar with the economies obtained by using Sommerfeld Track for fencing building sites, etc.

This newly manufactured track from new 3 galvanised 12/13G. wire netting, is reinforced to Sommerfeld patent with $\frac{1}{2}$ " round mild steel bars looped top and bottom. It is specially designed to meet your requirements and, being light in weight, can be rolled up and out into a fence in a matter of minutes, what is more, it is quite portable.

Sommerfelds Ltd.

Head Office WELLINGTON SHROPSHIRE ENGLAND Tel Wellington 1000
London Office 167 VICTORIA STREET LONDON SW1 Tel Victoria 1000

* MODERN FLEET OF CONTRACTORS PLANT NOW
AVAILABLE FOR HIRE IN THE LONDON AREA!

JACK BRANCH (LONDON)

OFFICE :
293 BALLARDS LANE • FINCHLEY • N.12
Phone : HILside 5068-9
Plant Manager : Mr. E. G. H. Parnell

CAMBRIDGE OFFICE:
Phone : WATERBEACH 571

ROYSTON OFFICE : Phone : ROYSTON 3007

WARRINGTON
Phone : PENKETH 2095

NOW haul two loads every trip ...with LW TANDEMS

Here is 1960's BIG earthmoving news: you can now pull and operate TWO scrapers with any LeTourneau-Westinghouse electric-control two-wheel Tournapull or four-wheel Speedpull prime-mover! LW has combined its

exclusive electric-control system (which sends working power *any* distance with *no* loss of efficiency) with a new quickly connected universal-swivel hitch, to give earthmoving its first practical-sized *tandems*.



You save three ways

Save on investment: You double your capacity for the price of another scraper and incidental hitch costs. You save the price of a second prime-mover.

Save on operating costs: One operator handles *both* scrapers. Your only extra operating cost is for a little more fuel per shift.

Save on maintenance: Your only extra *up-keep* costs are nominal. You have no extra engine, no extra transmission, no other major "extra" to maintenance and service.

Big operating advantages, too

Less pusher-power needed: Tandem scrapers load one at a time, so you don't need any more pusher-power for tandem *twin-loads* than you do for a *single* scraper!

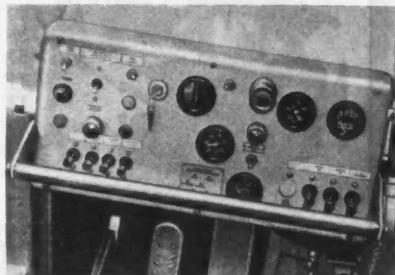
Less haul road abuse: You'll move more dirt with fewer machines pounding your haul roads. You have less congestion and delay, too.

More adaptability: You can hitch or unhitch the "extra" scraper in less than half an hour, to meet changing job conditions. And you can still interchange your scraper for a LeTourneau-Westinghouse Rear-Dump hauler at will!

This universal-swivel hitch securely joins front scraper to rear. Rear scraper electric leads "plug in" to jack on front scraper. Hitch permits complete manoeuvrability: you can turn in any direction, back up, perform any other manoeuvre possible with single scrapers. And there is no jack-knifing at any time.



Left row of fingertip switches controls apron, bowl-lift, and tailgate of rear scraper; right row controls front scraper. LW "electronics" solve problem of operating second scraper by sending power instantaneously, without auxiliary power source, and with no loss on-the-way. Other control systems cannot solve this problem efficiently.



LW Distributors everywhere are now ready to convert your present Tournapulls to tandem operation, or to equip you with new 1960 Tournapulls already set for tandem profits. We will send you complete information.

Speedpull, Tournapull—Trademark Reg. U.S. Pat. Off. TP-2256-DC-1cj



JACK OLDING

HATFIELD · HERTS Telephone: HATFIELD 2333

JACK OLDING & CO. (SCOTLAND) LTD.,
COUPAR ANGUS · PERTHSHIRE

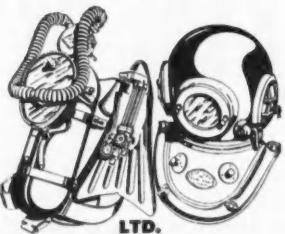


LeTourneau-Westinghouse Company Export Division, Peoria, Illinois, U.S.A.
(subsidiary of Westinghouse Air Brake Company)

"CARTRUK"
"THEY'RE ON SITE EVERYWHERE"
— Mobile Trailer Vans to suit all applications. 10', 12', 18' and 22' x 7' 6".

ENGLISH ELECTRIC
ERCTION DEPARTMENT

Illustrated 16' x 7' 6" Standard Model
CARTRUK LIMITED, BEEHIVE MILL, STOCKPORT
Telephone: 5227/8

DIVING SPECIALISTSUnderwater
Surveys.Underwater
Cutting,
Welding,
Explosive work.DIVERS,
FROGMEN
AND PLANT
HIRED IF
PREFERREDRates from
£7 7s. per day.**UNDERWATER CONSULTANTS**

Immediate and efficient teams available anywhere in the world.

For Diving Contracts, consult:
MARTIN WELDING AND CUTTING CO. LTD.
Tel: (day) Dartford 24139 DARTFORD, KENT. (night) Farningham 2452

GOOD NEWS for CONTRACTORS
YOUR HUTTING PROBLEMS SOLVED!

CONSULT PRICES D/D
ANYWHERE U.K.

GREEN BROS

Tel: 224 (BRANDON) LTD • BRANDON • SUFFOLK

**RAILS, SLEEPERS AND
EVERYTHING FOR SIDINGS.
CONSTRUCTION AND
MAINTENANCE.**

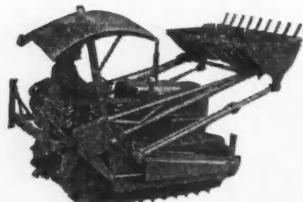
Write to **WHITES**
of Widnes

Estd
1869

R. WHITE & SONS (Engineers) LTD., P.O. BOX 2, WIDNES, LANC.

Telegrams: "RAILS, WIDNES". Telephone: WIDNES 2425 (Three lines)

2

HIRESOUTHALL 5601/2 & 3814
SOUTHAMPTON 48864**SALES****SERVICE & SPARES**

Distributors

BARFORD

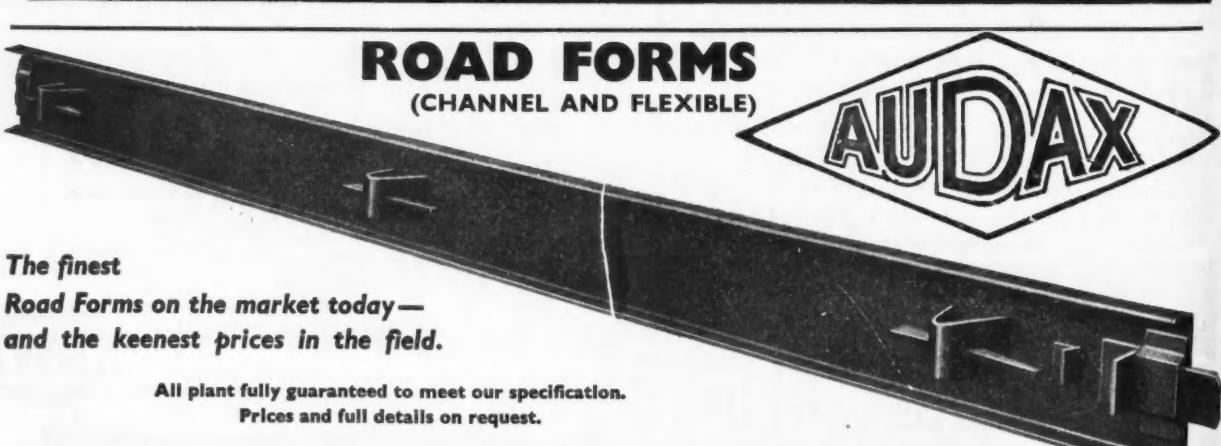
"75" & "150"

DUMPERS

and

full range of

MIXERS

**THE WESTERN HIRE Co. Ltd.**CANAL YARD, HAYES ROAD, SOUTHALL, MIDDX
101-103 STATION ROAD, SHOLING, SOUTHAMPTON**ROAD FORMS**
(CHANNEL AND FLEXIBLE)**The finest****Road Forms on the market today—
and the keenest prices in the field.**All plant fully guaranteed to meet our specification.
Prices and full details on request.**AUDAX, CENTRAL AVENUE, WEST MOLESEY, SURREY.**

Telephone: Molesey 6071 (5 lines).

HIKE YOUR TOWER CRANES *from* **GRAYSTON**

BRAND NEW BABCOCK WEITZ
types
G15 AND G30

Fully Experienced Technical & Erection Staff At Your Disposal

**32 STEWARTS ROAD,
BATTERSEA S.W.8
MACAULAY 6688
(10 lines)**

LANCASHIRE OFFICE
Haydock Lane, Haydock,
St. Helens.
Ashton in Makerfield 7631 (5 lines)

YORKSHIRE OFFICE
10 Park Square,
Leeds.
Leeds 32861 (5 lines)

RAYLORS

SCAFFOLDING & CONTRACTORS' PLANT FOR HIRE OR SALE

Also Huge SALES STOCKS of Tools, Equipment and Clothing for IMMEDIATE DELIVERY

SOLE N.E. AGENTS FOR BENFORD CONCRETE MIXERS & DIESEL DUMPERS

Literature on Request

H. B. RAYLOR & COMPANY LIMITED

YORK

Thomas Street Works, Hull Road
"Phone: 55661 (5 Lines)

STOCKTON-ON-TEES

Hawthorn Hill Road
"Phone: 65681 (3 Lines)

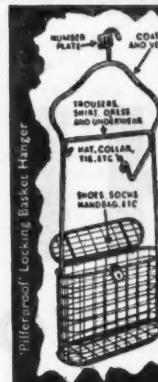
SIEBER FOR

A "7 STAR" LOGICAL CLOAKROOM

- * SAVES SPACE = SAVES COST
- * PRESERVES GARMENTS
- * ENSURES HYGIENE
- * REDUCES ABSENTEEISM
- * AIRS AND DRIES WET CLOTHING
- * MEETS NEW FACTORY ACT

Installed in Factories, Stores, Offices, Swimming Baths, etc., throughout the country.

JAMES SIEBER Equipment Co. Ltd.
Africa House, Kingsway, London, WC2
Tel: HOLborn 4531, 5121



SURFACING AND FOUNDATION CONSTRUCTION

ASPHALT SURFACING TO B.S.S.
BITUMINOUS MACADAM
TARRED MACADAM
TARSPRAYING, ETC.
MASTIC ASPHALTS

ROADS - DRIVES - CAR PARKS

WAYWARDEN
LTD.
LARKSWOOD 5451-2

LINER

*Slab Block and
Brick Machine*

Makes Plain Slabs, Grooved, or Tongued and Grooved Slabs, Frogged or Plain Bricks, Rock Faced and other Building Blocks. Hand Tamping unnecessary. Fast in operation. Needs only wood pallets. Write for Illustrated Brochure.

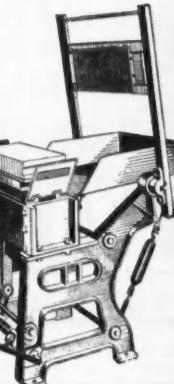
HIRE PURCHASE TERMS —

ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY Co. Ltd.

89 Park Road, Gateshead, E

Phone: 72501 (10 lines) Grams: "Liner, Gateshead"



GRADED CLINKER

**B
Y
R
O
A
D**

**&
R
A
I
L**

Speciality: Washed and Graded Clinker Filter Media
Largest Screening Plant in London, output 100,000 tons per annum

G. J. PALMER & SONS

Ferndale Works, Manorway, East Ham, E.6

DEPOTS AND WHARVES: BARKING, POPLAR AND KINGSTON-ON-THAMES

Established 1869

Ring Albert Dock 3464 (4 lines)

ASHES & BREEZE

A FAST WORKER-HIRE A MICHIGAN



J. M. BEACH

BERWIN PARK

**MODEL 125A
2½ cu. yds.**

**CHOBHAM
SURREY
CHOBHAM 479**

July 28 1960

THE CONTRACT JOURNAL

SUPPLEMENT

i b

BIG NAMES
GET MOBILE
WITH
HARDUN'S
MOBILE SITE OFFICES



Hardun's Mobile Site Offices are in ever increasing demand from the country's leading construction companies. These versatile and robust offices are specially designed to meet the needs of the Public Works Contractor.

Made from finest quality timber and exterior grade plywood, they can be equipped as office or sleeping quarters and supplied in the purchasing company's colours and signwritten if required.



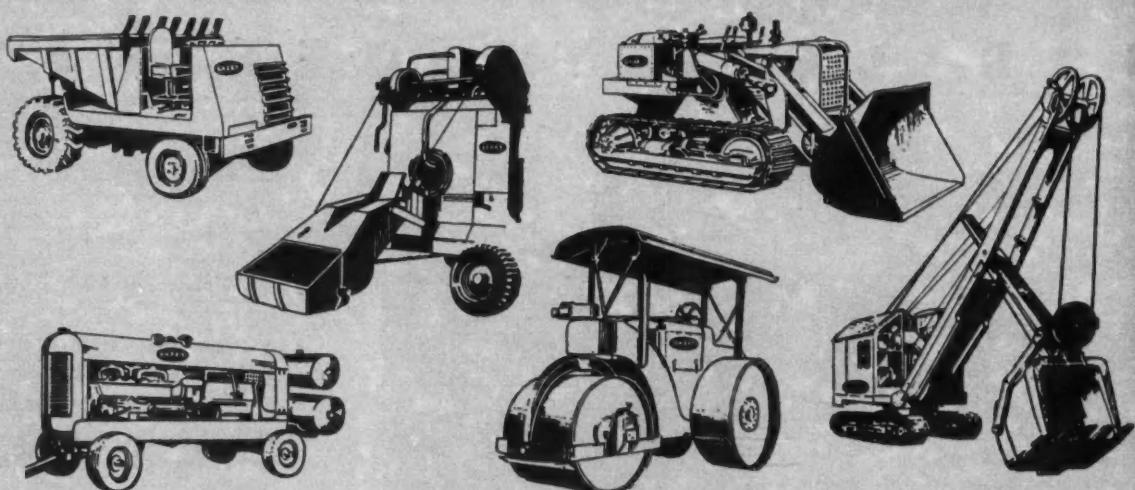
PORTABLE TIMBER BUILDINGS are available in a great range of sizes and designs. Send for illustrated literature.

HARDUN & SONS LTD.

HORTON ROAD WEST DRAYTON MIDDLESEX TEL WEST DRAYTON 3088-9 & 3761-2

PLANT HIRE

Gazeway



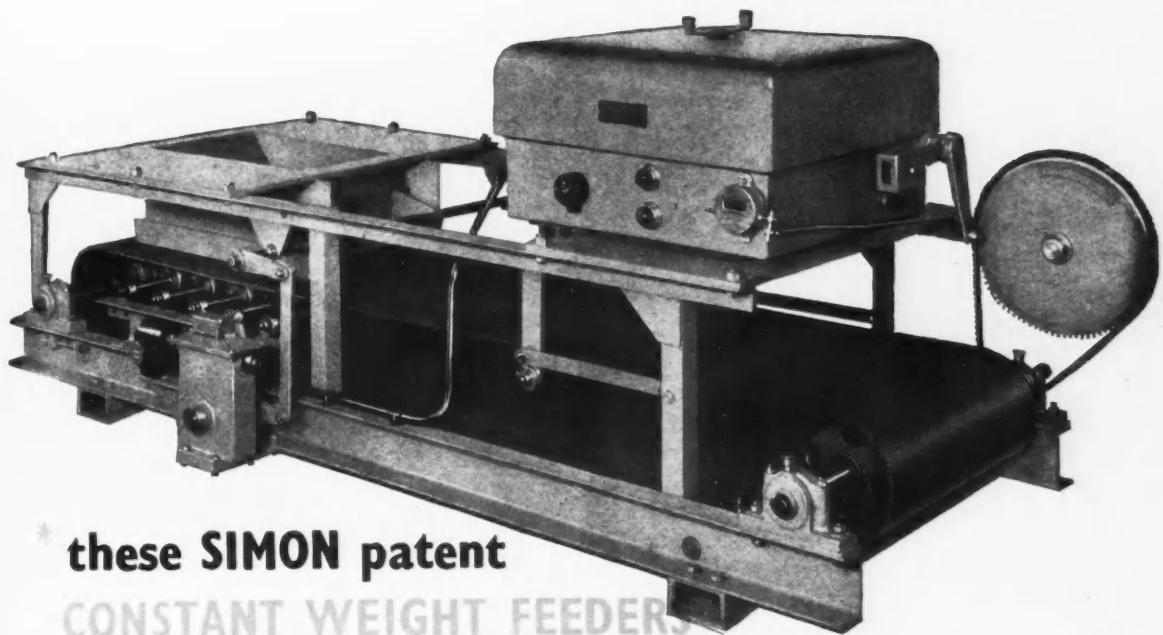
Gives you the
finest choice
of the finest
equipment.

GAZEWAY PLANT HIRE LIMITED

One of the GAZE Group of Companies

PORTSMOUTH ROAD, THAMES DITTON, SURREY. TEL: EMBERBROOK 5511 & 6147 (NIGHT 6147)

READY MIXED CONCRETE PLANT
CIVIL ENGINEERING PLANT



* these SIMON patent
CONSTANT WEIGHT FEEDERS
are the electro mechanical brains
which are built into the

**SIMDINE
CONTINUOUS
BATCHING
and
MIXING PLANT**

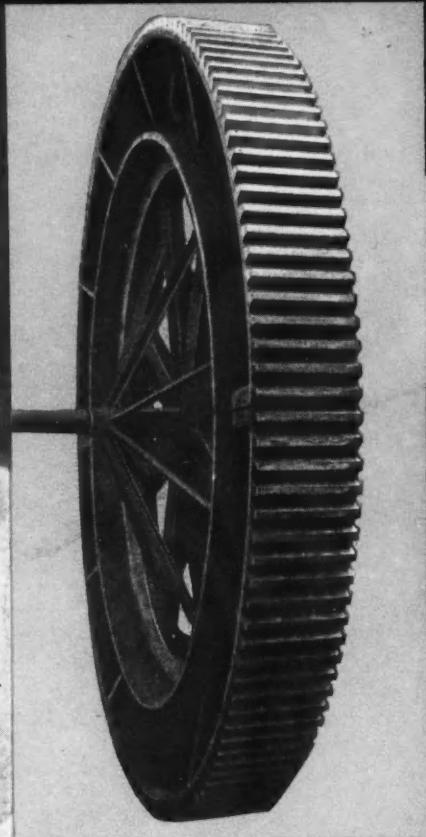
for the Ready mixed Concrete and Civil Engineering Industries. Designed to deliver a continuous flow of materials at any desired rate per hour irrespective of any alteration in bulk density or changes in the ability of materials to flow

- * NO WEIGH LEVERS TO PULL!
- * NO WEIGH BUTTONS TO PUSH!
- * TOTAL ELIMINATION OF HUMAN ELEMENT IN WEIGHING!

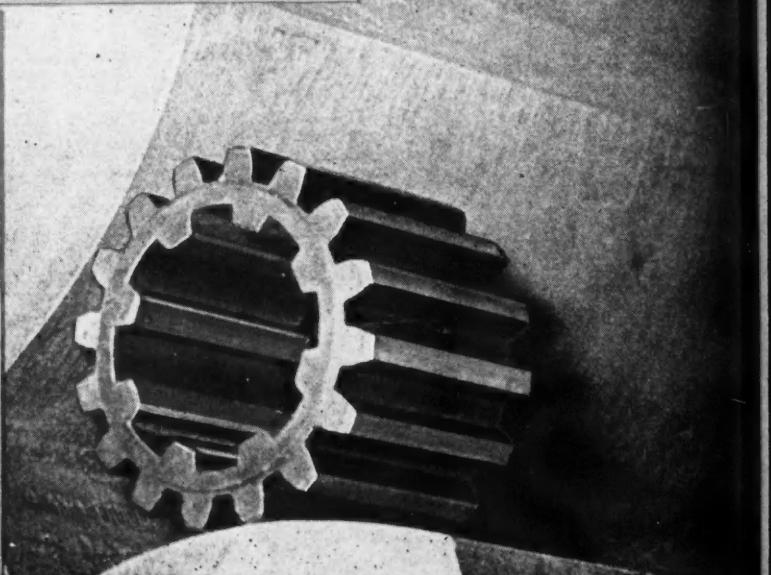
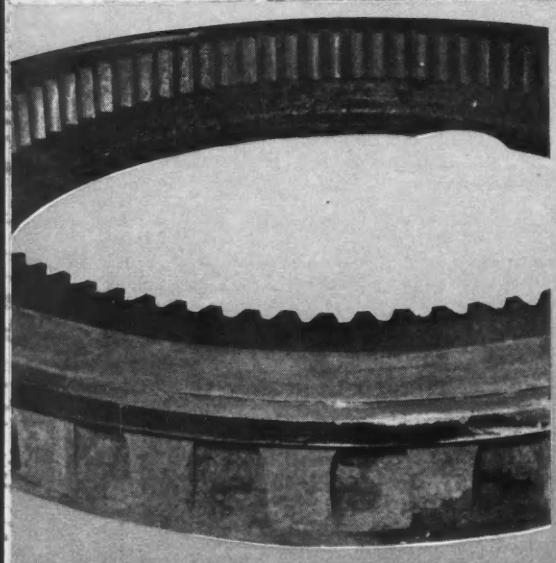
WRITE NOW
FOR FULL DETAILS
OF THIS RANGE OF PLANT
FROM

RICHARD SIMON & SONS LTD.
PHOENIX WORKS
VERNON RD. BASFORD NOTTINGHAM
SIMDINE DEPT. TEL. NOTTM. 77731

GEARS OF ALL SIZES and TYPES reconditioned



By Appointment to
H. M. THE QUEEN
Agricultural Engineers
P. W. Dillaway LTD.



GEARS OF ALL DESCRIPTIONS.
Inions, Bevels, Helicals, Crown
Wheels etc., rebuilt to standard
izes, machined to correct form,
iving wearing qualities surpassing
ew. Highly skilled craftsmen are
mployed with every facility to
nsure efficient and economical
epairs. Let us quote for all your
econditioning.

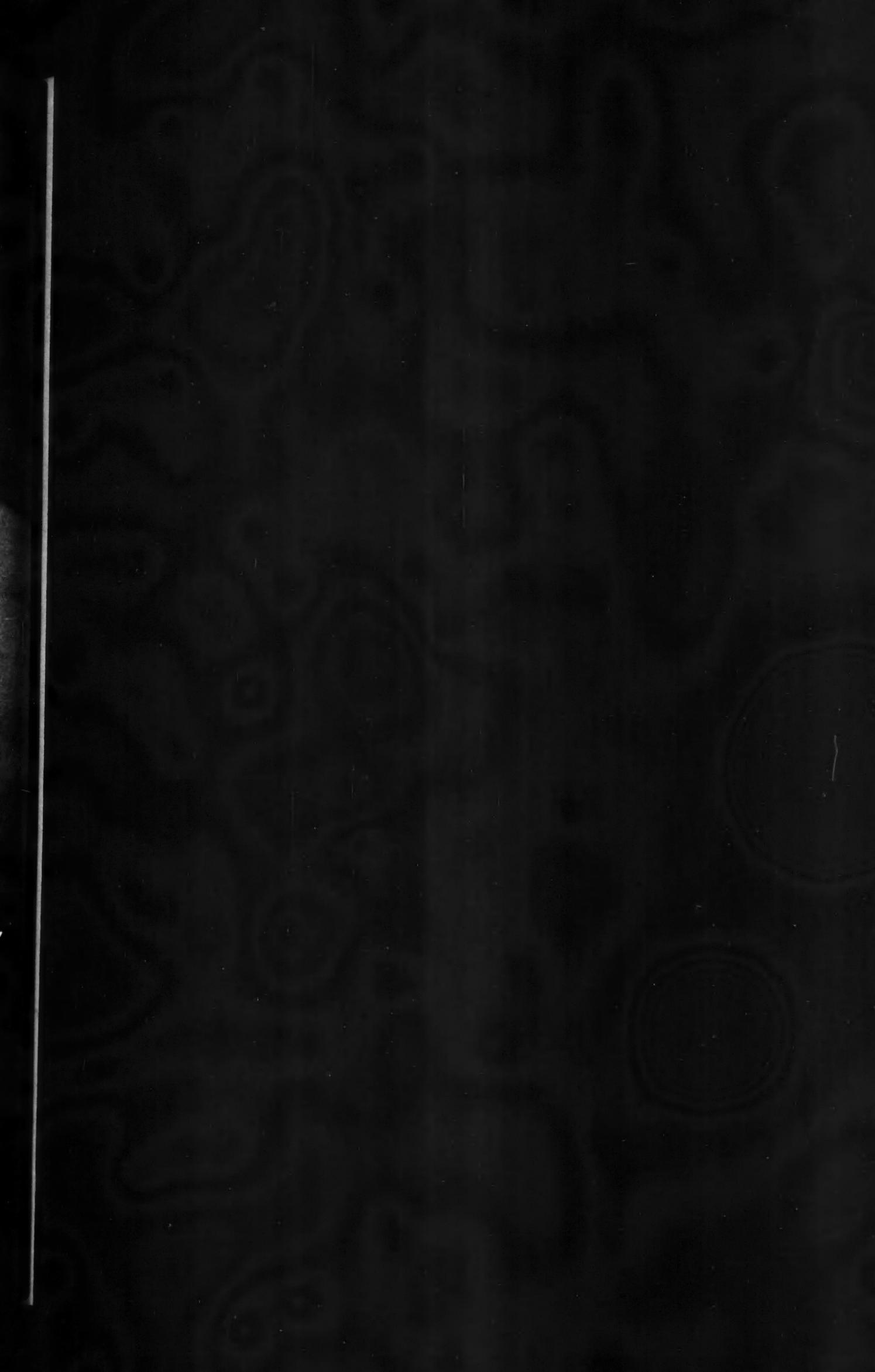
DILLWAY

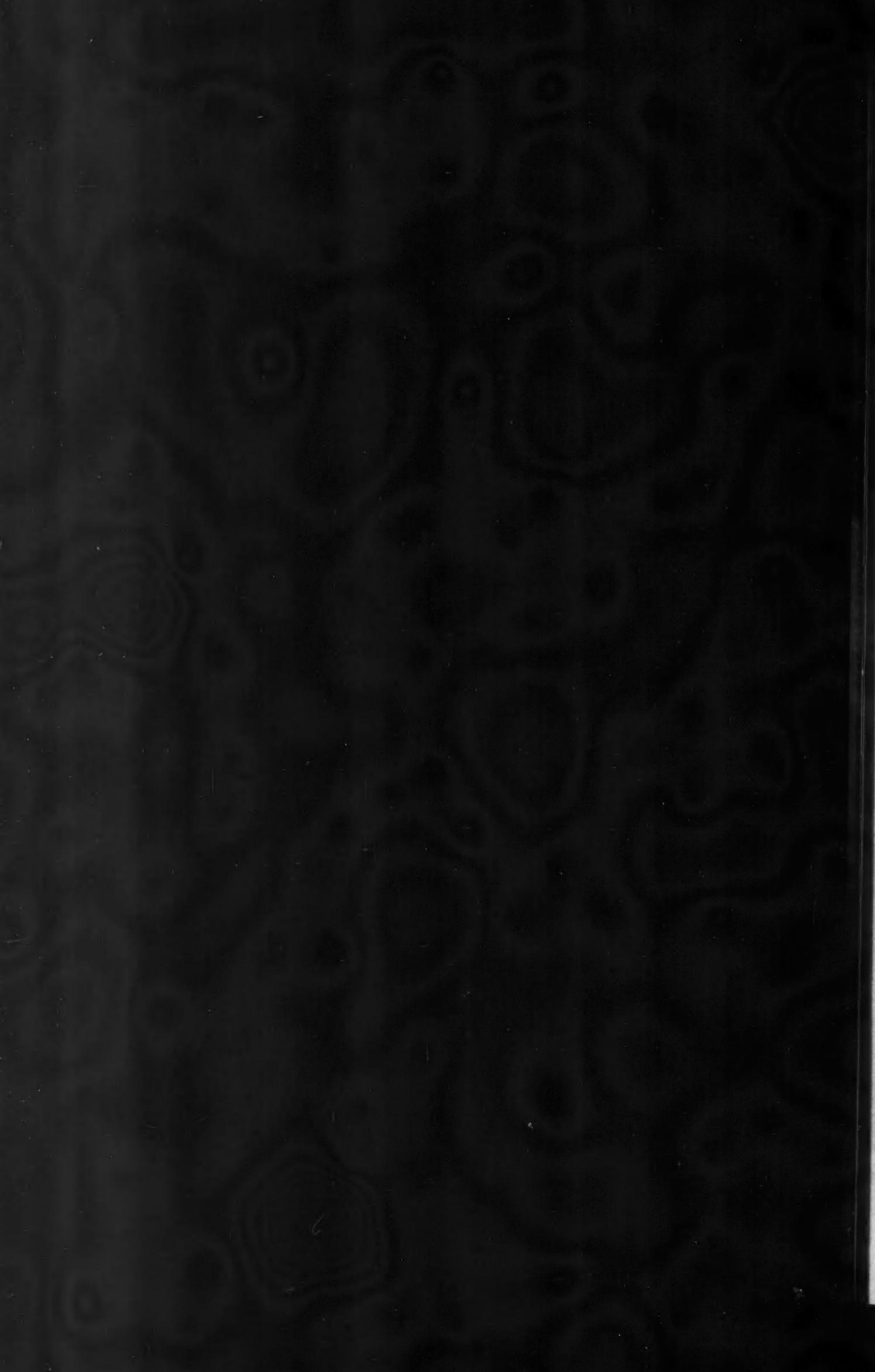
P. W. DILLWAY LTD

Head Office and Works:
Southall,
Middlesex.
Tel: Southall 6511

Scottish Office and Works:
32 Burnfield Works:
Giffnock, Glasgow.
Tel: Giffnock 1125-6

West Country Office and Works:
Bishopsteignton Road:
Teignmouth, Devon.
Tel: Teignmouth 1325





FREE HAULAGE for 9 truckloads out of 15

Not a once-in-a-lifetime offer
but a down-to-earth fact!
Compared with other methods of
haulage Ruston diesel locomotives
often cut costs by 60%, giving, in
effect, free haulage for 9 truckloads
out of 15. It's being proved day after
day in mines, quarries, sand and gravel
pits, plantations, collieries and
construction sites, where **Ruston locos**
are saving big money. No sense in
deciding on haulage without discovering if it
could be your money.

Now air-cooling!

The introduction of an air-cooled
diesel power unit puts an end to
freezing-up and topping up...
makes Ruston LBT locos a still
better proposition for material
movement!

RUSTON narrow-gauge
locomotives

make every load a real pay-load

Yes! 10 Years ahead... The latest RECORD

TYPES	607B3	707B2	805A3
Maximum Radius	92 ft.	99 ft.	99 ft.
Maximum S.W.L.	3 tons	5 tons	6 tons
S.W.L. at Maximum Radius	200 ft. 1 in.	212 ft. 6 in.	212 ft. 6 in.
Swing Speed	200 f.p.m.	200 f.p.m.	200 f.p.m.
Max. Free Travelling Height	135 ft.	135 ft.	128 ft.
Max. Height "Static"	500 ft.	500 ft.	500 ft.
Max. Height "Climbing"	UNLIMITED		

Made by the Biggest and Oldest Tower Crane Manufacturers
Ets. F. POTAINE & CO.
LA CLAYETTE (S & L), FRANCE
RECORD TOWER CRANES

Main Distributors for United Kingdom:
BRIERE (London) LTD.
56 Victoria Street, London, S.W.1
Tel.: VICToria 4583

Sole Concessionaire for United Kingdom:
GRV. BRIERE
—SALES—SERVICE—SPARES—
The Most Efficient and Specialised Tower Crane Organisation in this Country:
All Details, Prices and References on Request
For the Full Range (18 Different Types Available).
—Special Requirements are Undertaken—
THE RECORD CRANES...
...RECOGNIZED AS THE EASIEST AND FASTEST TOWER CRANES TO BE ERECTED...
HIGHEST EXISTING PERFORMANCE

LINER

NO. 2 PORTASAW

IMMEDIATE DELIVERY FOR £156 OR ON HIRE PURCHASE TERMS .. ONLY 10% DEPOSIT

- RIPS
- CROSS CUTS
- BEVELS

Easy Portability makes the No. 2 Portasaw indispensable on the building site. Powered by a petrol engine or electric motor. Economical in use, cuts costs by as much as 80% compared with hand-sawing.

Other models available... send for illustrated leaflet.
THE LINER CONCRETE MACHINERY CO. LTD.

273, PARK ROAD, GATESHEAD, 8.
Telephone: 72501. Telegrams: "Liner, Gateshead."

London Office & Showrooms: Liner House, Lexden Road, Acton, W.3. Tel: ACOm 8931

Please forward particulars of LINER PORTASAWS.

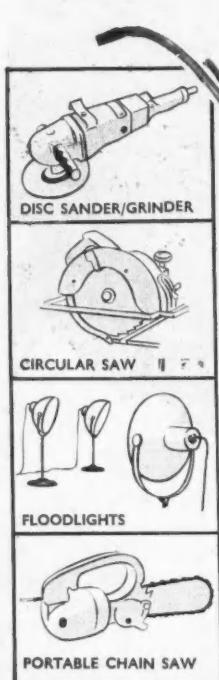
NAME _____

ADDRESS _____

273

more tool power

with an **ONAN ELECTRIC PLANT**



Onan contractors' model—2,500 watts AC series AJ electric plant—delivers enough power for a crew of three or more men using the type of tools illustrated. Also powers electric drills, soldering irons, paint spray equipment, paint scrapers, grass cutters and hedge trimmers. Quick-starting, long-life, single-cylinder, 4-stroke Onan performance-certified petrol engine. Available in 115, 230 or 115/230 volts.

KANGO HAMMER power

—Wherever ONAN goes Kango goes—the pair that put paid to the costly pneumatic drill and large compressor. Kango plus Onan breaks concrete quickly and economically. For your contract these tough twins are right for the site—together they can tackle any job anywhere!



Full details from Sole U.K. Distributors

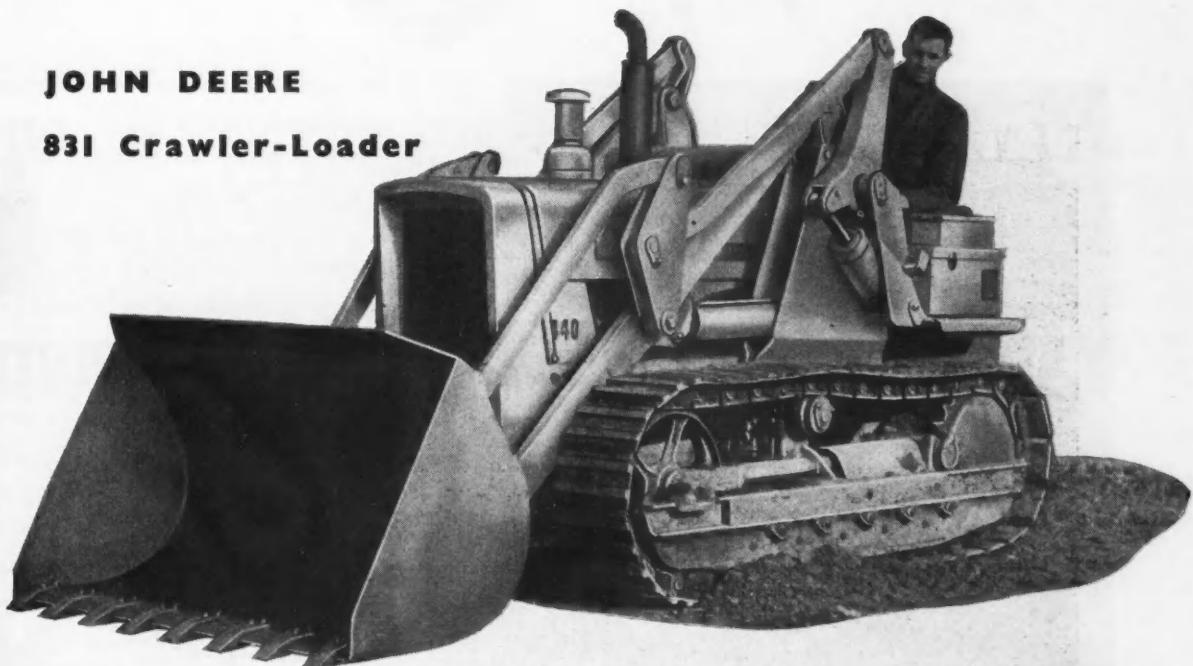
G.M. POWER PLANT CO. LTD.

Dept. F, 1-3 Richmond Rd., Ipswich, Suffolk. Tel: Ipswich 41795

ANOTHER ADDITION TO OUR TRAXCAVATOR FLEET *

JOHN DEERE

831 Crawler-Loader



In response to demand for low hire charges, we investigated the claims of various makers and, having given the **JOHN DEERE 831** Loader extensive tests, recommend it as the machine with the HIGH output for the SMALL job. Although small in dimension, a large output is surprisingly obtained from the use of the latest developments in this field. *A direction reverse halves loading time and this, coupled with the fastest hydraulic action we have seen, brings results out of proportion to size.*



The most comprehensive fleet of hire machines available

Cat 977 $2\frac{1}{4}$ cu. yds.

955 $1\frac{1}{2}$ cu. yds.

HT4 $1\frac{1}{4}$ cu. yds.

Drott 4-in-1 1 cu. yd.

J. Deere 831 $\frac{7}{8}$ cu. yd.

MOBILE HAULAGE

LTD

230 Tottenham Court Road

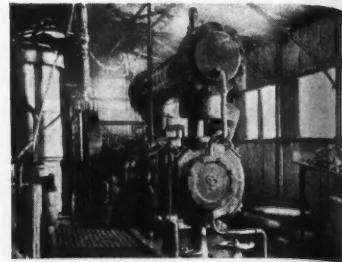
London W.1.

Telephone

LANGHAM 7833/4/5

The Traxcavator Specialists

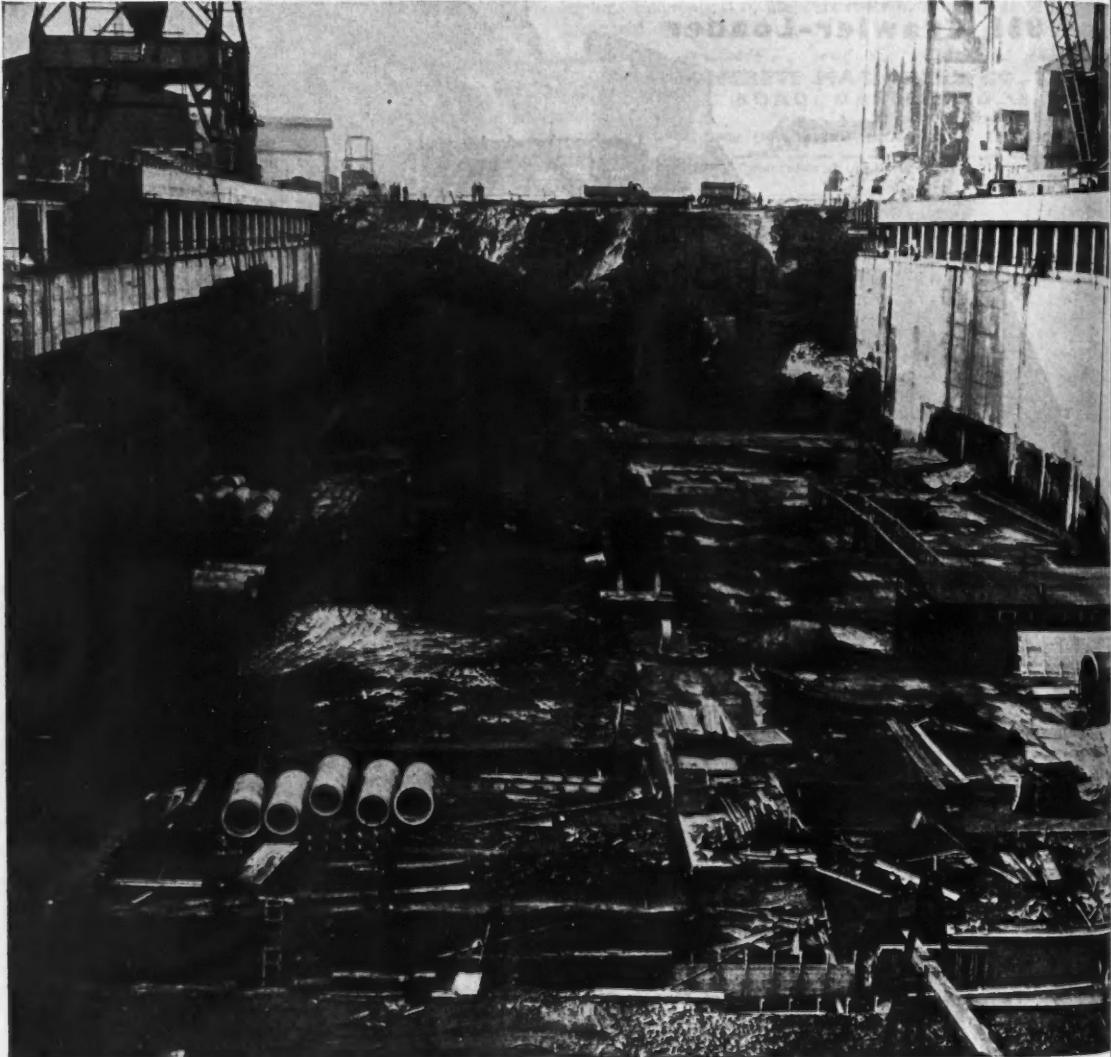
ON THE CAMMELL LAIRD NEW DRY DOCK

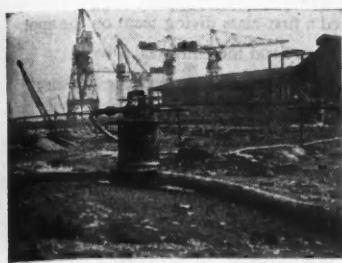


One of two Consolidated Pneumatic, horizontal, slow-speed, double-acting type TCB Compressors supplying air for operating pneumatic tools.

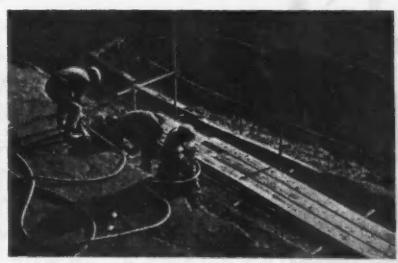
A. Monk & Co make full

A general view of part of the excavation for Cammell Laird's No. 5 Dry Dock, on which CP-32 rock drills were employed.





A Consolidated Pneumatic No. 77 Sludge Pump in service to deal with seepage.



(and below) Squaring up the excavations with Consolidated Pneumatic No. 117 Breakers.



A Consolidated Pneumatic type 125-RO-2 rotary "Power Vane" compressor in service on the new dry dock site.

use of CP equipment

Construction work, now well under way for Cammell Laird's new Birkenhead Dry Dock, is one of the many large projects on which leading Civil Engineering Contractors, A. Monk & Company Limited are currently engaged.

The new Dock involved the use of rock drills for the excavation of some 400,000 cu. yards of hard sandstone, and other operations called for compressed air equipment, such as pneumatic pumps to deal with seepage, breakers and picks for trenchwork and trimming, and grinders for surfacing.

The progress of the contractors, as shown in these pictures, is a tribute to the performance of CP compressors and plant put into service by A. Monk & Company Limited on these operations.



Photos published by the courtesy of Messrs. Cammell Laird
(Shipbuilders & Engineers) Ltd.
Consulting Engineers: Rendel, Palmer & Tritton



Consolidated Pneumatic

EXPANSION JOINTING

for
CONCRETE ROADWAYS
CONCRETE RUNWAYS
VERTICAL JOINTS IN
WALLS, BRIDGES ETC.

$\frac{1}{4}$ " $\frac{3}{8}$ " $\frac{1}{2}$ " and $\frac{3}{4}$ "
THICKNESSES
LENGTHS & WIDTHS
AS REQUIRED



PERMANITE

L I M I T E D

455 OLD FORD ROAD · LONDON E3 · Tel: ADVance 4477 (20 lines)

A complete
diving
service
. . . ready
day-and-
night!



Underwater Surveyors.
Contractors & Engineers
to Consulting & Civil
Engineers, and County
and Local Authorities.
On Admiralty Lists.

UNIVERSAL DIVERS LTD.

40 North John St., Liverpool 2
Telephone : CENtral 4226
Also at Newcastle and Weymouth

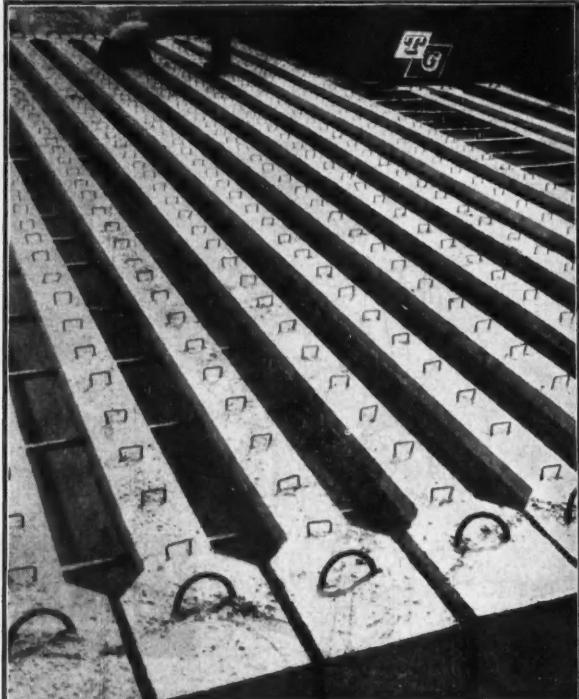
PRESTRESSED PRECAST UNITS FOR THE ENGINEER

UNITS FOR INDUSTRIAL PLANTS
ARCHITECTURAL PROJECTS, CIVIL
ENGINEERING & PUBLIC WORKS

Photograph reproduced by courtesy of
S. Mehew, Esq., O.B.E., B.Sc., A.M.Inst.C.E.,
A.M.T.P.I., County Surveyor of Derbyshire,
showing 40'0" beams prestressed, pretensioned,
laid for the new bridge on the A.50 at Fostons,
Derbyshire.

Main Contractors:— D. T. Bullock & Co. Ltd.
Civil Engineers, Aldridge, Staffs.

Seven Works cover the country offering a complete service for the production of precast units and prefabricated structures. We can arrange for our representative in your area to call and discuss your projects.

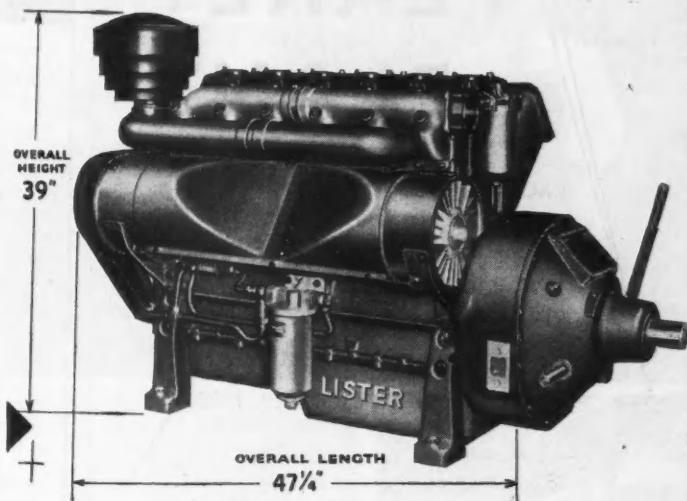


TARMAC VINCULUM LIMITED
Ettingshall, Wolverhampton. Telephone: Bilston 41101 (Fourteen Lines).

Latest additions to the LISTER range of air-cooled diesel engines

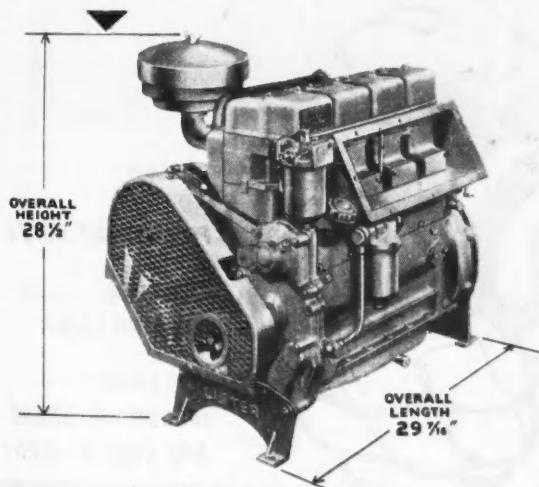
With continuous ratings up to 72 h.p., Lister air-cooled diesel engines now provide the power for an even greater variety of contractors' plant and equipment than before.

(right) The six-cylinder 'HA/HB6' fitted with clutch



(below) The four-cylinder 'SL4'

The extended range of Lister air-cooled diesel engines now includes the following:



ENGINE TYPE	HORSEPOWER				
	750 r.p.m.	1000 r.p.m.	1500 r.p.m.	1800 r.p.m.	2000 r.p.m.
LD1	1.5	2.0	3.0	3.5	
LD2	3.0	4.0	6.0	7.0	
SL1		2.4	3.6	4.25	4.75
SL2		4.8	7.2	8.5	9.5
SL3		7.2	10.8	12.75	
SL4		9.6	14.4	17.0	19.0
HA2		12.0	19.0	22.0	
HA3		18.0	28.5	33.0	
HA6			57.0	66.0	
HB2					24.0
HB3					36.0
HB6					72.0
Speed	650 r.p.m.	850 r.p.m.			
VA	5.75	7.5			

A comprehensive range of accessories is available for all Lister air-cooled diesel engines.

Ask for full details of these and other Lister Blackstone engines up to 1500 h.p.

R. A. LISTER & CO. LTD., Dursley, Gloucestershire. Phone: 2371
London Office: Imperial House, Kingsway, W.C.2. Phone: TEMple Bar 9681

Phone **BRISTOL
93131**

PLANET PLANT HIRE

EXCAVATORS
COMPRESSORS
TRACTOR-SHOVELS
VIBRATORY-ROLLERS
DUMPERS, HOISTS, PUMPS
FULL RANGE OF MIXERS, ETC.

Victoria House, Temple Gate, Bristol, 1



Contractors: Messrs. Wates Ltd. Flats on Wychall Farm Estate, Birmingham,
City Architect: A. G. Sheppard Fidler Esq., M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

METALWORK

for the Building and Civil Engineering Industries

BALUSTRADES RAILINGS
FIRE ESCAPES SPIRALS
SPECIAL STAIRCASES
BRIDGE BALUSTRADING

BIGWOOD BROS.

(BIRMINGHAM) LIMITED

WOODFIELD ROAD • BALSALL HEATH • BIRMINGHAM, 12
Established 1879 Phone: CALthorpe 2641/2
London Offices: 68 VICTORIA STREET, LONDON, S.W.1

**IF IT NEEDS TO BE STOPPED
—IT NEEDS**



FOR RUGGED DUTY!

**FOR LONG
WORKING LIFE!**

**FOR EVERY
INDUSTRIAL BRAKE
AND CLUTCH NEED!**

INDUSTRIAL BRAKE LININGS

*For Technical Information get in touch
with your nearest Don depot*

SMALL & PARKES LTD

HENDHAM VALE WORKS • MANCHESTER 9

COLlyhurst 2511

LONDON OFFICE:

261 Kingston Road, London, SW19 Cherrymoor 3806/7

ABERDEEN 26662
BELFAST 28967
BIRMINGHAM 5 Midland 4659
BLACKBURN 6581
BRADFORD 51114
BRISTOL 27214
CARDIFF 27026
CARLISLE 21589
CHESTER 21280
COVENTRY 26688
DUNDEE 26728
EDINBURGH 1 Waverley 4294
GLASGOW C2 Central 4595
HARROGATE 67058
HULL 52072
IPSWICH 53023

LEEDS 3 20664/5
LEICESTER 56266
LEYTON Leytonstone 6068
LIVERPOOL Royal 5202 and 1251
MANCHESTER 3 Blackfriars 0396
MIDDLESBROUGH 44576
NEWCASTLE-ON-TYNE 2 27142 and 27942
NOTTINGHAM 46562/3
SHEFFIELD 1 25529
SOUTHAMPTON 21276
STOKE-ON-TRENT 44021
WAKEFIELD 4571
WIMBLEDON Cherrywood 3806/7
Republic of Ireland:
DUBLIN, 35 Westland Row 66597 and 66518



Lollies up, lads! Boys in a Cotswold village tuck in as their favourite refreshment is unloaded from an Eldorado Austin.

In Oxford's busy traffic an Eldorado 5 ton Austin passes Christ Church College.

To London's Leicester Sq. Theatre Austin brings evening supplies from Eldorado.

Austin and the Ice Cream year of the century

Will we ever have another summer like that of 1959? Odds are 200 to 1 against it in years. But what a summer it was! And what a summer for ice cream!

Over 1,000 tons of Eldorado ice cream were delivered every week. Never were vehicles put to such a test. All day, 7 a.m. till 10 p.m., every day (Sundays too) Eldorado's 140 Austins were on the move. From 44 depots between Inverness and Truro, Austins delivered to shops, cinemas, restaurants, hotels, holiday camps, beach kiosks, Army and Air Force bases. Some, to ease peak pressure, made all-night runs from London to the North.

To the summit—By Austin

One Austin even climbed a mountain! Place—a Derbyshire peak. Destination—a cafe at the summit. And the owner's challenge to Eldorado: "I'll sell it if you

can get it here." It meant a daily hair-raising climb up a rocky footpath—a climb no other vehicle had attempted. But the Austin, a 2 tonner, got there. And Eldorado collected several new accounts in the district.

Most strenuous delivery service

"In peak times ours is perhaps the most strenuous delivery service any vehicle can make," says Mr. W. J. Thomas, Eldorado's Transport Manager. "Our Austins stand up to real punishment. In fact, they haven't time to break down. To avoid idle vehicles in off-peak times we keep our fleet to a minimum. So reliability is absolutely vital. Ice cream is a 7 day week and

when something unusual, like last summer, occurs, we must depend on the reliability of our vehicles more than ever."

Even in off-peak times, Eldorado's Austins, from $\frac{1}{2}$ ton vans to 2, 3 and 5 ton trucks, are busy, particularly in the mud and rough at race meetings and showgrounds. "We are turning over more and more to Austin," say Eldorado.

The entire Austin commercial range— $\frac{1}{2}$ ton vans to 7 ton trucks—is warranted for 12 months and backed by B.M.C. Service.

AUSTIN 
THE AUSTIN MOTOR COMPANY LIMITED
LONGBRIDGE • BIRMINGHAM



... suits both user and supplier

ADVANTAGES

- ★ **To the User** — Increased productivity with increased working capital. Economies made possible by scrapping obsolete machinery.
- ★ **To the Supplier** — Will not lose customers by failing to offer credit facilities.
- ★ **To Both** — Progressive expansion by the maximum use of the MUTUAL PLAN.

Write for copy of this booklet NOW

MUTUAL FINANCE LIMITED

A Mercantile Credit company

BANKERS

201 REGENT STREET · LONDON · W.I.



and Branches

Member of Finance Houses Association

CONTACT
**BARKING
DEVELOPMENTS**
CO. LTD.

for

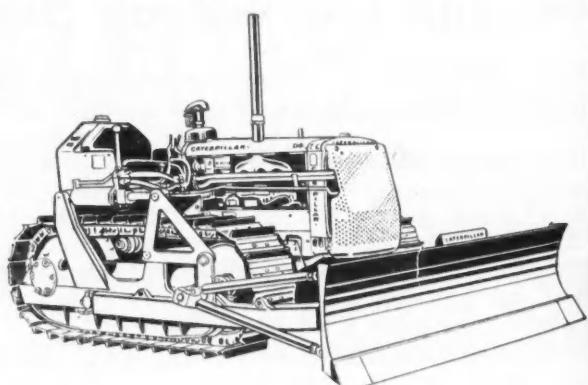
PLANT HIRE

PHONE :

RIPPLEWAY 2408 & 1245
(3 lines)

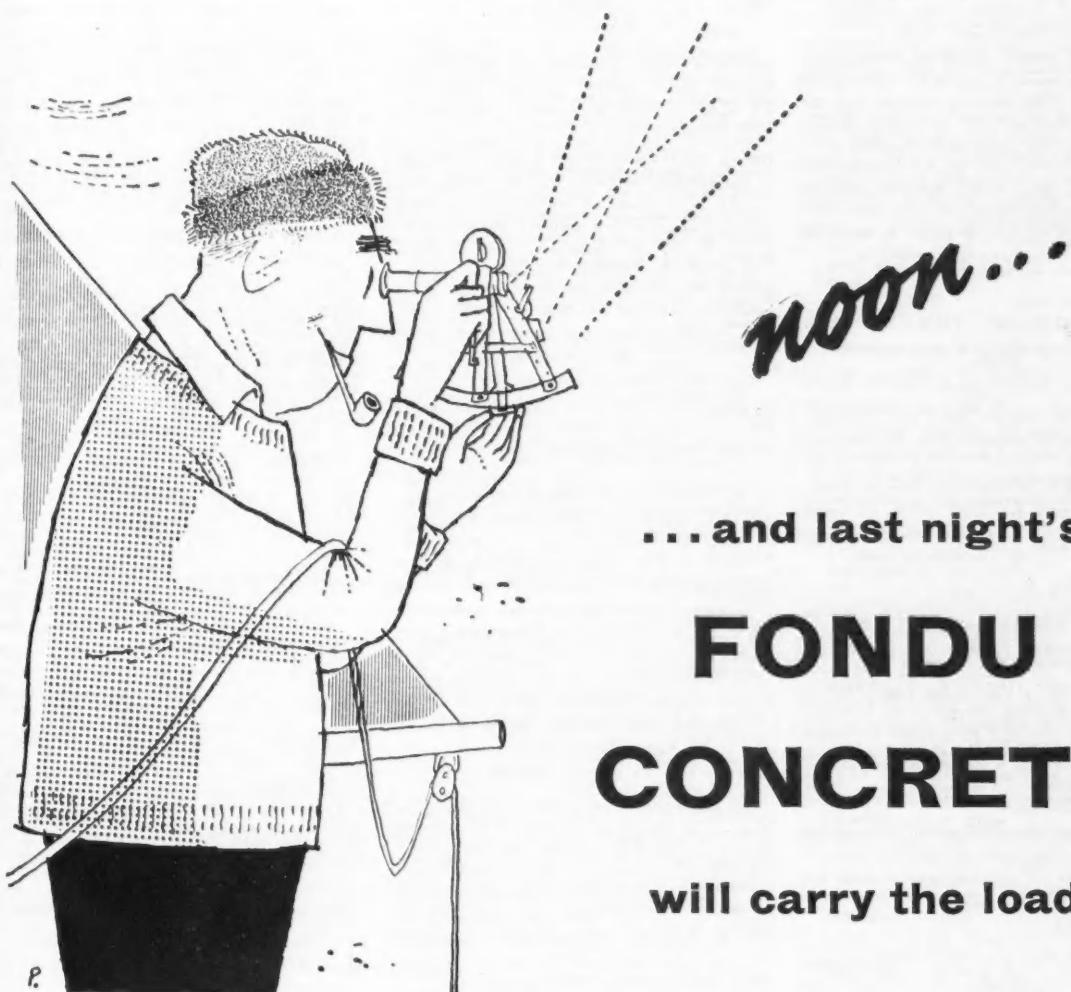
MOBILE COMPRESSORS · PORTABLE COMPRESSORS
EXCAVATORS · MECHANICAL SHOVELS · DUMPERS
TRAXCAVATORS · BULLDOZERS · ROAD ROLLERS
CONCRETE MIXERS

- MODERN DIESEL-DRIVEN MACHINES
- EXPERIENCED OPERATORS
- HOURLY, DAILY OR WEEKLY RATES



Address :

**FRESH WHARF · HIGHBRIDGE RD.
BARKING · ESSEX**



... and last night's

FONDU CONCRETE

will carry the load

In fact you will be well on the safe side because, for most jobs, work carried out with FONDU concrete is ready even earlier. For Trench Reinforcements, Floor Repairs and Renewals, Steps, Sewerage and Drainage work, CIMENT FONDU is unequalled. Pipes jointed with CIMENT FONDU mortar can be smoke tested within a few hours of jointing.

Remember—for most purposes concrete made

with CIMENT FONDU is ready for use 12 to 15 hours after placing, and at 24 HOURS it is stronger than other cements 90 DAYS old. Also, used with suitable aggregates, CIMENT FONDU produces Refractory and Insulating concretes of the very highest quality.

Let us send you our 32-page Booklet "THE CEMENT FOR INDUSTRY".

The Cement for Industry

FOR SPEED • STRENGTH • RESISTANCE • REFRACTORINESS

LAFARGE ALUMINOUS CEMENT CO. LTD. 73 Brook Street, London, W.1. Tel: MAYfair 8546



AP/98

July 28 1960

CONTRACTS

BOROUGH OF NELSON.
PRIVATE STREET WORKS—SURREY ROAD.

TENDERS are invited for the MAKING-UP of SURREY ROAD, Nelson, comprising approx. 1,200 sq. yd. of CARRIAGEWAY, together with Flagged Footways, Verge Works, Surface Water Drainage, and other ancillary works.

Contract documents may be obtained from the Borough Engineer and Surveyor, Town Hall, Nelson, Lancashire, on deposit of £2 2s. (cheques payable to Nelson Corporation), returnable on receipt of a bona-fide Tender not subsequently withdrawn.

General Conditions of Contract and Drawings may be inspected at the Borough Engineer's Office, Towns, in plain sealed envelopes endorsed "Private Street Works—Surrey Road," should be delivered to the undersigned not later than Noon on TUESDAY, the 16th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

F. W. ROBERTS,
Town Clerk.Town Hall,
Nelson.
11th July, 1960.**BOROUGH OF TOTTENHAM.**
WARWICK GARDENS/FAIRFAX/EFFINGHAM ROADS.

76 DWELLINGS (BLOCKS 2-5 STOREYS HIGH).

Builders wishing to TENDER are requested to notify the Borough Engineer, Town Hall, Tottenham, N.15, not later than 1st AUGUST, 1960, together with £2 2s. deposit refundable upon the submission of a bona-fide Tender. Plans may be seen at the Town Hall, N.15.

As soon as possible after the receipt of the deposit, copies of the Bills of Quantities, Form of Tender, and all necessary documents will be forwarded to the applicants, stating the closing date for the receipt of Tenders.

The Council do not bind themselves to accept the lowest or any Tender.

M. LINDSAY TAYLOR,
Town Clerk.Town Hall,
Tottenham, N.15.**BROADSTAIRS AND ST. PETER'S URBAN DISTRICT COUNCIL.**

PROTECTION WORKS TO PIER AND SLIPWAY—BROADSTAIRS HARBOUR.

The Council invite TENDERS for the CONSTRUCTION of a CONCRETE PROTECTIVE APRON and the INFILLING and SEALING OFF with a 9in. thick R.C. slab of an area of approx. 100 sq. yd., together with the Construction of a Short Flight of Concrete Steps and other incidental Works.

Drawings may be seen at the Office of the Engineer and Surveyor, Pierremont Hall, High Street, Broadstairs, Kent, on payment of a deposit of Two Pounds, which will be refunded on receipt of a bona-fide Tender and the return of the documents.

Tenders, in plain sealed envelopes endorsed "Protection Works—Broadstairs Harbour," and bearing no mark or indication of the sender, must be delivered to the undersigned not later than Noon on 3rd SEPTEMBER, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

H. C. NORRIS,
Clerk of the Council.Pierremont Hall,
Broadstairs,
Kent.**BANSTEAD URBAN DISTRICT COUNCIL.**

KERBING, FOOTPATH AND SURFACE WATER DRAINAGE WORKS.

TENDERS are invited for the ABOVE-MENTIONED WORKS which will be carried out in a number of roads within the District.

The work will comprise the CONSTRUCTION of a REINFORCED CONCRETE BUS LAY-BY, with Tar-macadam Footpaths, and Construction of Soakaways, and various ancillary works.

Specifications and Bills of Quantities may be obtained from, and Conditions of Contract and Drawings may be inspected at, the Office of the Engineer and Surveyor, MR. A. M. DAVIES, B.Sc., A.M.I.Mun.E., Council Offices, The Walk, Ebbw Vale, Mon., on payment of a deposit of £2 2s., refundable on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, in plain sealed envelopes endorsed "Tender for Roadworks—Classified Roads," must be returned to the undersigned not later than TUESDAY, the 16th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

F. L. SHAW,
Clerk of the Council.The Council House,
Banstead,
Surrey.
18th July, 1960.**THE TEES VALLEY AND CLEVELAND WATER BOARD.**

BALDERHEAD IMPOUNDING RESERVOIR.

Contract documents are now being prepared by the Board's Consulting Engineers, MESSRS. EDWARD SANDEMAN, KENNARD AND PARTNERS, of Westminster, for the CONSTRUCTION at BALDERHEAD, on the River Tees, near Romaldkirk, North Riding of YORKSHIRE, of an EARTH RESERVOIR EMBANKMENT approx. 155ft. high and 1,000ft. long at the crest, containing approx. 2,300,000 cu. yds. of fill. The Concrete Cut-off Trench is expected to reach a depth of 100ft. or thereabouts, and its volume will be approx. 50,000 cu. yd.

The ancillary works will include 14ft. internal dia. Tunels, Boreholes, Ventilation, Air Shaft, etc.

The Board propose to invite Tenders for the Construction of this Reservoir from selected contractors. Contractors wishing to be considered for inclusion in the list of those invited to tender should therefore apply to the undersigned in writing not later than the 1st SEPTEMBER, 1960.

Applicants must indicate recent works of a similar nature they have carried out, giving the approx. costs and the names of Engineers to whom reference may be made. Applicants must also state their financial capacity to carry out the work.

Construction is anticipated to commence in the Spring of 1961.

E. A. MORRIS,
Clerk of the Board and Chief Executive Officer.

G.P.O. Box No. 60,
Water Board Offices,
Coronation Road,
Middlebrough,
18th July, 1960.

CONTRACTS

GODMANCHESTER BOROUGH COUNCIL.

CONTRACTS

BOROUGH

SEWERAGE SCHEME—CONTRACT NO. 2A.

TENDERS are invited, on a Fixed-price Basis, for the ABOVE WORK, comprising the CONSTRUCTION of about 430yd. of 6in. and 95yd. of 9in. SALT GLAZED WARE SEWERS, PRECAST CONCRETE MANHOLES, SMALL IMPHOUSE with 77yd. of 4in. Spun-Iron Rising Main, various House Connections, and appurtenant works, in the Borough of Godmanchester.

General Conditions of Contract, Specifications and Bill of Quantities may be obtained from the Council's Engineer, Mr. JAMES MESSRS. J. AND D. M. WATSON, MM.I.C.E., 67 Tufton Street, Westminster, S.W.1, on and after 29th JULY, 1960, on payment of a deposit of Ten Guineas refundable only to contractors who submit bona-fide Tenders and return all documents and Drawings. Deposit cheques should be made payable to the Godmanchester Borough Council, or Order, and be sent to Messrs. J. D. and D. M. Watson, MM.I.C.E.

Sealed Tenders, endorsed "Tender for Sewerage Contract No. 2A," and bearing no name or mark indicating the sender, are to be delivered to the undersigned not later than Noon on FRIDAY, 26th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

PHILIP S. DAVIES, M.A.,
Town Clerk.Town Hall,
Godmanchester.**PETERSFIELD URBAN DISTRICT COUNCIL.**

12 OLD PEOPLE'S DWELLINGS—BARMAH ROAD/STATION ROAD, PETERSFIELD.

TENDERS are invited for the ERECTION of 12 OLD PEOPLE'S DWELLINGS at the ABOVE SITE. Tender documents may be obtained from H. T. THOMAS, A.M.I.Mun.E., Engineer, Petersfield Town Hall, Petersfield upon payment of £2 2s., which will be refunded on receipt of a bona-fide Tender, not subsequently withdrawn, or the return of the documents.

Tenders must be returned to the undersigned in a sealed envelope, endorsed "Old People's Dwellings," not later than Noon on WEDNESDAY, 24th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

H. H. CREEDON,
Clerk of the Council.Town Hall,
Petersfield, Hants.

15th July, 1960.

EBBW VALE URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

RASSAU HOUSING SITE.

CONSTRUCTION OF ROADS, SEWERS, FOOTWAYS, ETC.

The above-named Council invite TENDERS for the CONSTRUCTION upon the ABOVE HOUSING ESTATE of approx. 29,870 sq. yd. of CARRIAGEWAY, 19,700 sq. yd. of FOOTWAYS, 5,060 lin. yd. of SURFACES and SEPARATE SEWERS, from 6in. to 30in. dia. and 50 lin. yds. of 72in. dia. CONCRETE CULVERT, together with the usual ancillary Works.

Specification, Bills of Quantities and Form of Tender may be obtained from, and the General Conditions of Contract and Drawings inspected at the office of the Engineer and Surveyor, MR. A. M. DAVIES, B.Sc., A.M.I.Mun.E., Council Offices, The Walk, Ebbw Vale, Mon., on payment of a deposit of £2 2s., refundable on receipt of a bona-fide Tender.

Tenders to be enclosed in the envelope provided, sealed and delivered to the undersigned not later than 10 a.m. on WEDNESDAY, 17th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

HOWARD J. WILLIAMS,
Clerk of the Council.

District Council Offices,

The Walk,
Ebbw Vale,

Mon.,

18th July, 1960.

CHERTSEY URBAN DISTRICT COUNCIL.

HIGHWAYS ACT, 1959.

PREDRICT STREET WORKS.

TENDERS are invited, on a FIXED-PRICE BASIS, for the MAKING-UP of EIGHT PRIVATE STREETS, situated on the BOIS HALL ESTATE, ADDLESTONE. The Works comprise: Approx. 1,150 lin. yd. Kerbing: 4,800 sq. yd. Asphalt Footways: 330 lin. yd. Footway Edging: 950 sq. yd. Curved Carrigeway Reinforcement: 3,900 lin. yd. Resealing, etc., to Carrigeway Joints: 11,000 sq. yd. Double Surface Dressing to certain Carrigeways: 360 sq. yd. Verge Turfing, together with other incidental Works.

Contract documents may be obtained from, and the Drawings and Ministry of Transport Specification for Road and Bridge Works may be examined at the office of the Engineer and Surveyor, Surveyor's Department, The Orchard, Staines Lane, Chertsey, Surrey, upon payment of One Guinea deposit, which will be returned on receipt of a bona-fide Tender and return of the documents.

Tenders, in plain sealed envelopes endorsed "Private Street Works—Bois Hall Estate," must be delivered to the undersigned by Noon on FRIDAY, 2nd September, 1960.

The Council do not bind themselves to accept the lowest or any Tender they may receive.

A. REX HERBERT,
Clerk of the Council.

Council Offices,

18 Guildford Street,

Chertsey, Surrey,

July, 1960.

URBAN DISTRICT COUNCIL OF RAYLEIGH.

SURFACE WATER SEWER DIVERSION—HIGH STREET/KING GEORGE'S FIELD.

TENDERS are invited for the CONSTRUCTION of approx. 120 lin. yd. of 15in. dia. SURFACE WATER SEWER and ancillary items.

The Contract Drawings and General Conditions of Contract may be inspected at, and the Form of Tender, Specification and Bills of Quantities obtained from, the Office of the Engineer and Surveyor, Council Offices, Rayleigh, Essex.

Completed Tenders sealed in the envelope provided, must be delivered to the undersigned not later than Noon on MONDAY, 8th August, 1960.

C. E. FITZGERALD,
Clerk of the Council.

Council Offices,

Hockey Road,

Rayleigh, Essex.

20th July, 1960.

CONTRACTS

EAST SUFFOLK COUNTY COUNCIL.
STOWMARKET PRIMARY SCHOOL—ADDITIONS.

The Council propose to invite FIRM-PRICE TENDERS from selected builders, for the ERECTION of the SECOND INSTALMENT, of some 4,500 sq. ft. floor area, of STOWMARKET PRIMARY SCHOOL.

Drawings, prepared under the direction of MR. E. J. CUNDLIFFE, A.R.I.B.A., County Architect, can be seen at the County Hall, Ipswich, between 9 a.m. and 4 p.m.

Any contractor wishing to Tender should submit their name to the COUNTY ARCHITECT, County Hall, Ipswich, before the 12th August, 1960. From the names submitted a number of builders will be selected, and these will be furnished with Bills of Quantities, etc., or about the 22nd August; builders not selected will be notified at the same time.

Tenders are required by the 12th SEPTEMBER, 1960.

COUNTY BOROUGH OF DEWSBURY.
WESTTOWN REDEVELOPMENT—HIGH STREET IMPROVEMENT.

TENDERS are invited for the CONSTRUCTION of approx. 3,700 sq. yd. of TARMACADAM CARRIAGE WAY and 2,120 sq. yd. of FOOTPATHS in connection with the ABOVE.

Plans and Conditions of Contract may be seen at, and Specification, Bill of Quantities and Form of Tender obtained on payment of Two Guineas deposit, from the Office of the Engineer, Borough Surveyor, Municipal Buildings, Halifax Road, Dewsbury.

Tenders, in plain sealed envelopes endorsed "High Street Improvement," must be delivered to me by Noon on WEDNESDAY, the 7th September, 1960.

A. NORMAN JAMES,
Town Clerk.Town Hall,
Dewsbury.

6th July, 1960.

DISS URBAN DISTRICT COUNCIL.

DRAINAGE.

CONTRACT NO. 4.

TENDERS are invited for the CONSTRUCTION of the FOLLOWING WORKS:

- (a) Approx. 35yd. of 24in. dia. Concrete Sewer, together with Special Manholes and Connections to Existing Sewers.
- (b) Approx. 70yd. of 27in. dia. Concrete Sewer and Manholes.
- (c) Some Minor Alterations to the Treatment Works.

The work is to be carried out in accordance with the Specification and Drawing, and the services of Consulting Engineers to the Council, MESSRS. JOHN TAYLOR AND SONS, Artillery House, Artillery Row, London, S.W.1.

Copies of the Specification, Bill of Quantities and Form of Tender may be obtained from the offices of the Consulting Engineers, on payment of £5 (cheque only, made payable to the Council), which will be returned on receipt of a bona-fide Tender not subsequently withdrawn. The Drawings may be seen at the offices of the Engineer or at the Council Offices. Prints of the Drawings may be purchased from the Engineers.

Tenders, in plain sealed envelopes endorsed "Drainage" Contract No. 4," but bearing no distinguishing mark indicating the sender, must be delivered at my office not later than Noon on MONDAY, the 5th September, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

C. REED WILLIAMSON,
Clerk of the Council.

Council Offices,

Diss.

Norfolk.

NEWTON AND LLANIDLOES RURAL DISTRICT COUNCIL.

CARNO SEWERAGE AND SEWAGE DISPOSAL—STAGE 2.

The Council invites TENDERS from experienced contractors for the laying of approx. 9in. CONCRETE STEEL REINFORCED UNPRESSED SPUN-IRON SEWERS, and 1,020yd. of 6in. STONEWARE and SPUN-IRON SEWERS, with Precast Concrete Manholes, etc.; and for the Enlarging of the Existing Sewage Disposal Works, comprising the Addition of Filter Bed, Humus Tank, Storm Tanks, Sludge Drying Beds, Storm Overflow and Overall treatment works with ancillary Works at CARNO, situated about 11 miles west of NEWTON, on the Machynlleth Road.

Submitting documents may be obtained from the Consulting Engineers, MESSRS. W. HERBERT BAILEY AND PARTNERS, Cheltenham House, Bath, Somerset, on payment of a deposit of Three Guineas, payable to the Council, which will be returned on receipt of a bona-fide Tender not subsequently withdrawn and on return of all other tendering documents to the Consulting Engineers. The name and address of at least two Engineers under whose directions similar works may have been carried out by the applicants must also be submitted at the time of application.

Tenders for this Contract will be on a fixed-price basis.

Drawings may be seen by appointment at the office of the Council or of the Consulting Engineers, but technical questions will be answered at the latter office only.

Tenders, on the form provided, together with Bill of Quantities, priced and extended in ink, should be delivered to the undersigned not later than 9 a.m. on MONDAY, 22nd August, 1960, in a plain sealed envelope endorsed "Carno Sewerage."

The Council does not bind itself to accept the lowest or any Tender, and is not responsible for any expenses incurred by the tenders.

GEORGE E. GRAY,
Clerk of the Council.

Town Hall,

Newton,

Montgomeryshire,

18th July, 1960.

WEST KESTEVEN RURAL DISTRICT COUNCIL.

TENDERS FOR 28 HOUSES AND BUNGALOWS

TENDERS are invited for the CONSTRUCTION of TRADITIONAL TYPE HOUSES and BUNGALOWS in the following Parishes: ROPSLY—Six Bungalows and 12 Houses, CARLTON SCROOP—Four Bungalows;

Bills of Quantities, Drawings, Specification and Form of Tender can be obtained from the Council's Surveyor, Sandon Close, Grantham, on receipt of deposit of £2 2s. by cheque made payable to the West Kesteven R.D.C., which will be returned on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders to be forwarded to me at the Council Offices, Sandon Close, Grantham, in plain sealed envelopes marked "Erection of Houses/Bungalows at ——" by THURSDAY, the 1st September, 1960.

J. R. MORGAN,
Clerk of the Council.

CONTRACTS**BOROUGH OF MARGATE.**
BOWLING GREEN PAVILION, BIRCHINGTON.

TENDERS are invited for the PREPARATION of BASE, ERECTION of PAVILION and the SUPPLY and ERECTION of a TOOL SHED at BIRCHINGTON.

Plans, Specification and Bill of Quantities may be obtained from the Borough Engineer, 38 Grosvenor Place, Margate.

Tenders, in plain sealed envelopes endorsed "Bowling Green Pavilion," are to be received by the undersigned not later than 12 Noon on SATURDAY, 13th August, 1960.

T. F. SIDNELL,
Town Clerk.

Town Clerk's Office,
40 Grosvenor Place,
Margate.

CITY OF WORCESTER.
ST. CATHERINE'S VALE REDEVELOPMENT.**ADVANCE PREPARATION ROAD WORKS.**

TENDERS are invited for the CLEARANCE of the SITE; the LAYING of approx. 106 lin. yd. of KERBS and CHANNELS; the CONSTRUCTION of approx. 380 sq. yd. of ROADWAYS; and approx. 50 sq. yds. of SIDEWALKS. The PROVISION of TWO GULLIES and their Connection to the Sewer, together with appurtenant works in connection with the above.

Documents are obtainable from the City Engineer, 22 Bridge Street, Worcester, upon deposit of Two Guineas, returnable on receipt of a bona-fide Tender.

Closing date: WEDNESDAY, 24th August, 1960.
BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

HORNSEA URBAN DISTRICT COUNCIL.**TENDERS FOR LORRY**

TENDERS are invited for the SUPPLY and DELIVERY of ONE KARRIER BANTAM 2/3-ton TRIPPING LORRY. A defective Bantam lorry is offered in part-exchange.

Further details may be obtained from the Surveyor, Town Hall, Hornsea, Yorkshire.

Tenders, in plain sealed envelopes endorsed "Tender for Lorry," must reach the undersigned by 12 Noon on the 6th AUGUST, 1960.

The Council does not bind themselves to accept the lowest or any Tender.

J. A. DAVENPORT,
Clerk of the Council.

Town Hall,
Hornsea,
Yorkshire.

EAST ELLOE RURAL DISTRICT COUNCIL.**WATER MAIN DISTRIBUTION SCHEME.****CONTRACT NO. 19.**

TENDERS are invited for the LAYING of approx. 37,750 yds. of 4in., dia. and 3in. dia. ASBESTOS CEMENT CLASS "B" PIPE, together with Valves, Hydrants and ancillary Works, in various parts of the Rural District.

Bills of Quantities, Specification and Form of Tender may be obtained from H. RIPPIN, ESQ., A.M.I.C.E.R., A.M.I.Mech.E., A.M.I.W.E., Water Engineer and Manager, at the address below, on payment of a deposit of £2 2s., which will be refunded on receipt of a bona-fide Tender, not later than 1st September, 1960. The Conditions of Contract (Institution of Civil Engineers Standard, Fourth Edition, January, 1955) may be inspected by appointment at the office of the Engineer.

Completed Tenders, on the form provided, together with all documents, should be enclosed in plain sealed envelopes endorsed "Tender for Distribution Main," and returned to the undersigned, to be received by Noon on SATURDAY, 3rd September, 1960.

The Council does not bind itself to accept the lowest or any Tender.

J. C. PYWELL,
Clerk to the Council.

Council Offices,
Mattimore House,
Holbeck,
Building,
Lincs.

THE WEST HERTFORDSHIRE MAIN DRAINAGE AUTHORITY.**MAPLE LODGE WORKS.****CONTRACT NO. W.13.**

The West Hertfordshire Main Drainage Authority (from the County Council Sewerage Board) is invited to receive TENDERS on a Fixed-price Basis for the CONSTRUCTION of the FOLLOWING WORKS:

12 Sludge Drying Beds providing a total area of 13.7 acres.

1 Sludge Liquor Pumping Station, 1 Baled Sludge Area for Dried Sludge, including Four Loading Bays providing a total area of approx. 1.9 acres.

Approx. 2,300 lin. yd. of Concrete Access Roads. Approx. 1,850 lin. yd. of 10in. dia. Spun-iron Sludge Feed Main and Sludge Liquor Pumping Main.

1 Sludge Tank Filling Point, Garages, Messrooms, Office and Weighbridge. All necessary Pipelines, Channels, Culverts, Ducts, Manholes, Chambers, Roads, Paths, Paved Areas, and other appurtenant works.

All the works listed above shall be in accordance with the Drawing and Specification prepared by the Engineers, MESSRS. JOHN TAYLOR AND SONS, Artillery House, Artillery Row, Victoria Street, Westminster, London, S.W.1.

Copies of the Specification, Bill of Quantities, Form of Tender and Contract will be available on the 15th AUGUST, 1960, and may be obtained from the Engineer's Office upon payment of £5 (cheque only, made payable to the Board), which will be returned upon receipt of a bona-fide Tender. Applications for these documents, together with the deposit, should preferably be forwarded to the Engineer's Office before 3rd AUGUST, 1960.

The Drawings may be inspected at the Offices of the Engineers or at the Offices of the General Manager of the Board, Maple Lodge Works, Maple Cross, Rickmansworth, Herts., during normal office hours. If required, copies of the Drawings may also be purchased from the Engineers at a cost of approx. 36s. per set.

Tenders, in plain sealed envelopes endorsed "Maple Lodge Works—Contract No. W.13," should be delivered at my Offices on or before Noon on WEDNESDAY, the 28th September, 1960.

The Board does not bind itself to accept the lowest or any Tender.

(Signed) JOHN A. LONGMORE,
Clerk of the Board.

24 Castle Street,
Hertford, Herts.

CONTRACTS**COUNTY BOROUGH OF IPSWICH.**
HEATHSIDE TRAINING CENTRE, HEATH ROAD, IPSWICH.

TENDERS are invited for the ERECTION of an EXTENSION to the ABOVE OCCUPATION CENTRE for children and adults in Heath Road, Ipswich. The new accommodation consists of Three Workrooms and ancillary rooms.

Contractors wishing to tender should apply to the Borough Engineer and Surveyor, 19 Tower Street, Ipswich, enclosing a deposit of £2 2s. which will be returned upon receipt of a bona-fide Tender and return of the documents.

Drawings can be inspected at the above Office, and Bills of Quantities, Conditions of Contract and Form of Tender will be available on or about the 17th AUGUST, 1960.

Tenders, in a plain sealed envelope bearing the words "Tender for Extension—Heathside Training Centre," but with no name or mark to indicate the sender, must be received by me not later than 12 Noon on 9th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any Tender.

J. C. NELSON,
Town Clerk.

Town Hall,
Ipswich.

METROPOLITAN BOROUGH OF WANDSWORTH.**HOUSING AT CLAPHAM.**

Contractors wishing to TENDER for ERECTION of TWO-STORY HOUSES, 100ft. deep, 10ft. flat over, at PRESCOTT PLACE, should submit names to me by 3rd AUGUST, 1960, giving details of experience, plant, and technical and supervisory staff available, together with names of two technical and two financial referees.

Bills of Quantities will be issued to selected contractors in due course.

Drawings may be examined at Borough Engineer and Architect's Department at this address.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

BOROUGH OF LEOMINSTER.**SEWERAGE AND SEWAGE DISPOSAL SCHEME.**

The above-named Corporation invite TENDERS for the EXECUTION of WORKS of SOIL and SURFACE WATER SEWERAGE, comprising the Furnishing and Laying of about 4,000 yds. of 6in.-27in. Spun-iron Pipe and 600 yds. of 30in.-39in. Spun-concrete Tube, together with necessary Manholes, Catchment Outfalls, manholes; the Construction of a Sewage Disposal Works, consisting of a Sewage Pumping Station, a Stormwater Pumping Station, Grit Chambers, Primary Settlement Tanks, Stormwater Settlement Tanks, Three Percolating Pits, Filter Beds, Sludge Drying Beds and the Construction of an Effluent Pipe Line, together with all incidental and appurtenant Works.

The scheme has been designed by the Corporation's Consulting Engineer, F. E. H. SHENTON, ESC., M.S., M.R.I.C.E., F.R.P.H.E., of 52 Rochester Row, Westminster, London, S.W.1.

Contractors who must have had considerable experience in similar work, should send a deposit cheque of £10 10s., made payable to the Leominster Borough Council, after 25th July, to Messrs. Brassey Edwards and Sons, Town Engineers, Trowbridge, Wilts., who will supply the tendering documents, consisting of Specification, Quantities and Plans of the Work, and who will answer any technical queries in connection with this scheme. The deposit will be returned on receipt of a bona-fide Tender and on return of all printed documents and Plans after the Contract is let.

Tenders, in plain sealed envelopes endorsed "Leominster Sewerage Scheme," must be sent to the undersigned not later than Noon on MONDAY, 5th SEPTEMBER, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

K. DOWNS,
Town Clerk.

Municipal Offices,
Grange Court,
Leominster,
Herefordshire.

18th July, 1960.

BOROUGH OF LYMINGTON.**PRIVATE STREET WORKS ACT. 1892.****BARRS AVENUE GROUP.**

TENDERS are invited for MAKING-UP BARRS WOOD ROAD, BARRS AVENUE, BROOK AVENUE NORTH, BARRS WOOD DRIVE and MEADOW ROAD, within the Borough of Lympstone.

Plans and Conditions of Contract may be inspected at the offices of the Borough Engineer, Town Hall, Lympstone, from whom copies of the Specification, Bill of Quantities and Form of Tender may be obtained on payment of a sum of £2 2s., which is returnable on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, accompanied by Priced Bills of Quantities in plain sealed envelopes endorsed "P.S.W.—Barrs Avenue Group," must be delivered to the undersigned not later than First Post on MONDAY, 5th September, 1960.

The Council does not bind itself to accept the lowest or any Tender.

A. L. SLATER,
Town Clerk.

Town Hall,
Lympstone.

HORNCHURCH URBAN DISTRICT COUNCIL.**VERGE WORKS—HACTON LANE, BEVAN WAY.**

TENDERS are invited for the ABOVE-MENTIONED WORKS, comprising: (1) the EXCAVATION (approx. 400 cu. yds.) and SHAPING (approx. 8,000 sq. yds.) of EXISTING BANKS AND VERGES; (2) the CONSTRUCTION of THREE CAR-PARKING AREAS (total approx. 950 sq. yds.) in HARDCORE with SURFACE DRESSED GRASS. Also including daywork items for the Leveling of Council Tubs.

The Specification and Bills of Quantities may be obtained from, and the Conditions of Contract and Drawings inspected at, the Office of the Engineer and Surveyor, Council Offices, Billet Lane, Hornchurch, upon payment of a deposit of Two Guineas which will be refunded on the issue of a bona-fide Tender, on the acceptance of a Tender by the Council.

The documents must be returned to the undersigned not later than Noon on MONDAY, the 8th August, 1960, sealed in the envelope provided, which shall bear no indication of the persons(s) tendering.

F. L. COX,
Clerk of the Council.

Council Offices,
Billet Lane,
Hornchurch.

CONTRACTS**CONTRACTS****BEDFORDSHIRE COUNTY COUNCIL.**
IPSWICH-WEEDON TRUNK ROAD, A.428.**TURVEY BRIDGE REPAIRS.**

TENDERS are invited for REPAIRS to the STONE-WORKING on the TURVEY BRIDGE, and for Waterproofing the Arch Extrados. Natural matching stonework must be used throughout.

Copies of the Condition of Contract, Specification and Bills of Quantities may be obtained from the County Surveyor, Denes, Bedford, on receipt of a deposit of Two Pounds, which will be returned on receipt of a bona-fide Tender and the return of all documents.

Tenders must be delivered to the undersigned on or before FRIDAY, 19th August, 1960. In the envelope provided, together with all documents.

The Contract is subject to the approval of the Ministry of Transport, and the Council do not bind themselves to accept the lowest or any Tender received.

GEORGE BREWIS,
Clerk of the County Council.

Shire Hall,
Bedford,
July, 1960.

ISLE OF ELY COUNTY COUNCIL.
HIGHWAYS AND BRIDGES DEPARTMENT.
BIRMINGHAM-GREAT YARMOUTH TRUNK ROAD, A.47.**CONSTRUCTION OF FOOTBRIDGE AT GUYHIRNE.**

TENDERS are invited for the CONSTRUCTION of a FOOTBRIDGE, approx. 190ft. long, in Light Structural Steelwork cantilevered out from the side of the existing road bridge at Guyhirne.

Plans, Conditions of Contract, Specification, Bill of Quantities and Form of Tender may be obtained from the County Surveyor, County Hall, March, Cambs.

Tenders to be delivered to the undersigned, in the envelope provided, not later than Noon on MONDAY, 29th August, 1960.

The County Council do not bind themselves to accept the lowest or any Tender.

R. F. G. THURLOW,
Clerk of the County Council.

County Hall,
March, Cambs.
18th July, 1960.

BOROUGH OF WREXHAM.

TENDERS are invited for the SUPPLY and DELIVERY of approx. 221 CAST-ALUMINIUM STREET NAMEPLATES having approx. 2,606 Letters.

Tender Form giving size and detail of construction can be obtained on application to the Borough Engineer and Surveyor, 31 Chester Street, Wrexham.

Sealed Tenders, in the envelope provided, to be delivered to the undersigned not later than Noon on MONDAY, 15th August, 1960.

PHILIP J. WALTERS,
Town Clerk.

Guildhall,
Wrexham.

BOROUGH OF ELESMERE PORT.**CONTRACT NO. 301.****STREET LIGHTING—PRINCES ROAD AND CAPENHURST LANE.**

TENDERS are invited for the PROVISION and ERECTION of 58 GROUP A STREET LIGHTING COLUMNS, TAKING DOWN 34 GROUP B COLUMNS, and RE-ERECTING same throughout the Borough.

Contract documents obtainable from the Borough Engineer and Surveyor, Queen Street, Ellesmere Port. Sealed Tenders in the plain official envelope provided, must reach the undersigned by not later than 5 p.m. on MONDAY, the 22nd August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

R. J. BERNIE,
Town Clerk.

Municipal Offices,
Ellesmere Port,
Cheshire.

CITY OF YORK.**AMBULANCE SERVICE.**

TENDERS are invited for the FOLLOWING VEHICLES:

(a) One Lomas Junior Dual-purpose Ambulance on Bedford CAL Long-wheelbase Chassis.

(b) One Vauxhall Victor Standard Saloon Car. Specifications may be obtained from the Medical Officer of Health, 9 St. Leonard's Place, York, to whom Tenders, endorsed "Tender for Ambulance/Car," should be forwarded not later than 15th AUGUST, 1960.

T. C. BENFIELD,
Town Clerk.

CITY OF LIVERPOOL.**TENDERS invited for the SUPPLY and DELIVERY of PEDESTRIAN GUARD RAILS.**

Documents from the City Engineer and Surveyor, Municipal Buildings, Liverpool, 2. Tenders returnable by 12th AUGUST, 1960.

(J.6312) THOMAS ALKER,
Town Clerk.

LEIGHTON BUZZARD URBAN DISTRICT COUNCIL.

TENDERS are invited, on a FIXED-PRICE BASIS (i.e., without the inclusion of cost variation clauses for labour and materials), for the FOLLOWING WORKS:

HOCKLIFFE ROAD, A.4012 (Regent Street to Capstall Bridge); Laying and Jointing approx. 102 lin. yds. 12in. and 27lin. yds. 11in. Surface Water Sewer, including Manholes and other appurtenant Works.

Specifications, Bills of Quantities and Forms of Tender may be obtained from the Engineer and Surveyor, Council Offices, Leighton Buzzard. Tenders shall be accompanied by a deposit of £2 2s., which will be returned upon receipt of a bona-fide Tender. Conditions of Contract (I.C.E.) may be inspected during normal working hours.

Tenders, in plain sealed envelopes, endorsed "Surface Water Sewer," must be delivered to the undersigned not later than 12 Noon on TUESDAY, 23rd August, 1960.

The Council does not bind itself to accept the lowest or any Tender.

D. L. OVERTON,
Clerk of the Council.

Council Offices,
North Street,
Leighton Buzzard.
18th July, 1960.

CONTRACTS

THE CHELMSFORD BOROUGH COUNCIL.

AS AGENTS FOR
CHELMSFORD BOROUGH AND RURAL DISTRICT
COUNCILS JOINT SEWERAGE COMMITTEE.

BROOKEND SEWAGE DISPOSAL WORKS.

EXTENSION NO. 2.

The above Council invite applications from experienced civil engineering contractors wishing to TENDER for the CONSTRUCTION of EXTENSIONS to the BROOKEND SEWAGE DISPOSAL WORKS, comprising Sedimentation Tanks, Bacteria Beds, Humus Tanks, Pumping Station, Sludge Digestion Tanks, Power House and other works, at a preliminary estimate for which is approximately £400,000.

Preliminary application should be made, in writing, to the undersigned. Applicants will then be given further details of the proposed works, and asked to supply information regarding similar works recently carried out.

A selected panel of contractors will subsequently be invited to Tender for the above works.

B. A. FRANCIS,
Town Clerk.

Municipal Offices,
Coval Lane,
Chelmsford.
July 1960.

BOROUGH OF PORT TALBOT.
CONSTRUCTION OF SEA WALL—LITTLE WARREN.

TENDERS are invited for the ABOVE SCHEME, which is to be constructed in the form of a Sloped Wall on Beams, all in Reinforced Concrete, together with ancillary works. The wall is approx. 500yd. long, and will require approx. 1,200 cu. yd. of concrete.

Specifications, Bills of Quantities and Form of Tender may be obtained from the Borough Engineer, G. V. GRIFFITHS, A.M.I.C.E., on payment of a deposit of £2 2s., which will be returned on receipt of a bona-fide Tender not subsequently withdrawn and return of Tender documents.

Plans may be inspected by appointment only at the Borough Engineer's Department.

Completed Tenders, in plain envelopes endorsed "Construction of Sea Wall—Little Warren," to be received by the undersigned not later than Noon, 27th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

W. KING DAVIES,
Town Clerk.

Municipal Buildings,
Port Talbot.
18th July, 1960.

CRICKLADE AND WOOTTON BASSETT
RURAL DISTRICT COUNCIL.9IN. DIA. WATER MAIN—VASTERNE,
WOOTTON BASSETT.

TENDERS are invited for LAYING about 730yd. of 9in. dia. ASBESTOS-CEMENT WATER MAIN at ABOVE.

Plans and documents may be obtained on application to J. C. GRINDLEY, A.M.I.C.E., Engineer and Surveyor, and the undersigned, on payment of a deposit of Two Guineas, which is returnable on receipt of a bona-fide Tender not subsequently withdrawn and return of all plans and documents.

Tenders, in plain sealed envelopes, endorsed "Water Main—Vasterne, Wootton Bassett," must be delivered to the undersigned not later than 10 a.m. on TUESDAY, the 6th September, 1960.

The Council does not bind itself to accept the lowest or any Tender.

W. J. HOSIER,
Clerk of the Council.

Manor House,
Wootton Bassett,
Swindon,
Wiltshire.

CRICKLADE AND WOOTTON BASSETT
RURAL DISTRICT COUNCIL.IMPROVEMENTS TO 20 COUNCIL HOUSES AT
ASHTON KEYNES—(TYPE A—SEVEN, TYPE B—
SIX, TYPE C—THREE); LYNEHAM—FOUR.

FIXED-PRICE TENDERS are invited for the ABOVE WORK, including Provision of New Bathrooms and W.C.s, Draining and Hot Water Systems.

Specifications and Plans may be obtained from the Engineer and Surveyor, MR. J. C. GRINDLEY, A.M.I.C.E., on payment of a deposit of £2 2s., which is returnable on receipt of a bona-fide Tender.

Tenders, in plain sealed envelopes endorsed "Improvements to Council Houses," bearing no mark or initial of the sender, must be delivered to the undersigned not later than 10 a.m. on TUESDAY, the 6th September, 1960.

The Council reserves the right to accept Tenders for a single group of houses, or groups of houses, as considered necessary or desirable.

The Council do not bind themselves to accept the lowest or any Tender.

W. J. HOSIER,
Clerk to the Council.

Manor House,
Wootton Bassett,
Swindon,
Wiltshire.

SHIFNAL RURAL DISTRICT COUNCIL.

BECKBURY SEWERAGE AND SEWAGE DISPOSAL.

The Council invite TENDERS from experienced public works contractors having substantial previous experience of such works, for the LAYING of approx. 1,400 lin. yd. of 9in. and 6in. dia. CONCRETE AND STONEWARE SEWERS, together with CONCRETE TUBE MANHOLES, SEWAGE DISPOSAL WORKS, comprising Screening Chambers, Settling Tank, Bacterial Filters, Humus Tanks, Sludge Drying Beds, Sludge Pumping Station, and other incidental works.

The Drawings can be inspected at, and copies of the Specifications, Bills of Quantities, and Form of Tender can be obtained from the Engineers, MRS. WILLCOX, RAIKES AND MARSHALL, 33 Great Charles Street, Birmingham, 3, on or after THURSDAY, 11th August, 1960, on application, accompanied by statements of previous similar works executed, and a charge for ten Guineas drawn in favour of the Council as a deposit, which will be refunded after the delivery of a bona-fide Tender and the return of all documents supplied.

Tenders, on the form supplied, are to be delivered to the undersigned not later than 12 o'clock Noon on MONDAY, 12th September, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

Dated this 18th day of July, 1960.

GEORGE THOMAS,
Clerk of the Council.

The Grove,
Shifnal,
Shropshire.

CONTRACTS

HERTFORDSHIRE COUNTY COUNCIL.

PRIVATE STREET WORKS.

TENDERS are invited for MAKING-UP FIVE PRIVATE STREETS, having a total length of approx. 2240yd., at ST. MERYL ESTATE, CARPENTERS PARK.

The streets have carriageways 16ft., 20ft. and 24ft. wide, footways 5ft. and 6ft. wide and verges. The Work includes Surfacing the Existing Concrete Carriageways with Bitumen Macadam, Taking Up and Re-laying the Existing Pavings, Constructing New Footways with Bitumen Macadam, Taking Up and Re-laying the Existing Kerbing, and Supplying and Laying New Kerbing where necessary, and Constructing Footway Crossings. The Drawing will be supplied by the County Surveyor's Department, and copy of the Conditions of Contract, Specification, Bill of Quantities and Form of Tender may be obtained from the County Surveyor's Department, County Hall, Hertford.

Tenders must be delivered, in envelopes which will be provided, to the CLERK OF THE COUNTY COUNCIL, County Hall, Hertford, by the 17th AUGUST, 1960.

The Council does not bind itself to accept the lowest or any Tender.

CITY OF ROCHESTER.

62 FLATS—TROY TOWN REDEVELOPMENT AREA.

TENDERS are invited for the ERECTION of the ABOVE-MENTIONED DWELLINGS. Conditions of Contract, Bill of Quantities and Form of Tender may be obtained from J. A. PEEL, A.M.I.C.E., M.I.Mun.E., City Surveyor, 66 Maidstone Road, Rochester, on payment of a deposit of £3 3s., which will be refundable on receipt of a bona-fide Tender or on notification of inability to tender, together with the return of the documents.

This Tender is to be a Fixed-price Tender. Tenders should be returned in the suitably endorsed envelope provided, to the Town Clerk, Guildhall, Rochester, not later than 12 Noon, 6th SEPTEMBER, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

PHILIP H. BARTLETT,
Town Clerk.

Guildhall,
Rochester.
18th July, 1960.

CITY OF BIRMINGHAM.

TO PUBLIC WORKS CONTRACTORS.

The HOUSEBUILDING COMMITTEE invite TENDERS on a Fixed-price Basis for the CONSTRUCTION of CARRIAGWAYS and FOOTWAYS, and the CONSTRUCTION of SURFACE WATER SEWERS, together with Incidental Works, on the HIGHFIELD ESTATE, WARWICK ROAD.

Copies of the Specifications, Bills of Quantities and Forms of Tender may be obtained on payment of £2 2s. at the Office of SIR HERBERT J. MANZONI, City Engineer and Surveyor, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. The deposit will be returned on receipt of a bona-fide Tender.

Plans for the road and sewerage works can be seen at Rooms 339 and 39, respectively, Civic Centre, Birmingham, 1. Tenders enclosed in the envelopes provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, not later than 12 Noon on WEDNESDAY, 17th AUGUST, 1960, when they will be opened. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON,
Town Clerk.

Council House,
Birmingham, 1.

FAREHAM URBAN DISTRICT COUNCIL.

TENDERS are invited for the FOLLOWING—

(a) Hungerford Road Estate, Locks Heath. Construction of approx. 400 sq. yd. Access Road, 700 sq. yd. Path, 2,500 sq. yd. Grassing.

(b) St. Mary's Road Estate, Stubbington. Construction of Parking Lay-by, 700 sq. yd. Paths, 1,000 sq. yd. Grassing.

(a) and (b) may be awarded to the same or to separate tenders.

Documents on deposit of £2, from the Engineer and Surveyor, Westbury Manor, Fareham, to be returned to me by 16th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

B. W. RANDS,
Clerk to the Council.

"Merton,"
5 Grove Road,
Fareham, Hants.

TENTERDEN RURAL DISTRICT COUNCIL.

MAIN DRAINAGE OF HIGH HALDEN.

T30/3 CONTRACT 1.

The Tenterden Rural District Council are prepared to receive TENDERS for the LAYING of approx. Three Miles of SMALL DIAMETER SEWERS, the CONSTRUCTION of TWO SEWAGE PUMPING STATIONS, Sewage Disposal Works, and other ancillary works.

Particulars and Specifications may be obtained, and Plans may be inspected, at the Offices of the Consulting Engineers, MESSRS. HOWARD HUMPHREYS AND SONS, Victoria Station House, Victoria Street, Westminster, S.W.1, on and from MONDAY, 25th July, 1960, until FRIDAY, 12th AUGUST, 1960, between the hours of 10 a.m. and 4 p.m., upon payment of cheque (made payable to the Rural District Council) for Three Guineas, which deposit, after the Council have reached a decision, will be returned to each contractor who has submitted a bona-fide Tender, which will not subsequently be withdrawn. The contractor must have had considerable experience in similar works and be prepared to furnish good and approved security for the due execution of the Contract.

Tenders are to be on the official form and are to be delivered to the undersigned in a sealed envelope, endorsed "Tender for Main Drainage of High Halden (T30/3 Contract 1)," but bearing no name or other mark indicating the sender, not later than Noon on MONDAY, 22nd AUGUST, 1960. The Council do not bind themselves to accept the lowest or any Tender.

J. M. DELVES,
Clerk of the Council.

Council Offices,
High Halden,
Ashford, Kent.
July, 1960.

CONTRACTS

DEVON COUNTY COUNCIL.

TENDERS are invited for CONSTRUCTING 103yd. of 18in. dia. SPUN-IRON PIPE SEA OUTfall at SOUTH HUISH, near Kingsbridge.

Particulars and Tender Forms, returnable by MONDAY, 5th September, 1960, from COUNTY SURVEYOR, Coaver, Topsham Road, Exeter.

BOROUGH OF GILLINGHAM.

SURFACE WATER SEWERS.

KNIGHT AVENUE/PIER ROAD AREA, GILLINGHAM.

TENDERS are invited for the CONSTRUCTION of SURFACE WATER SEWERS in the Knight Avenue, Pier Road area of Gillingham.

The work comprises Excavation for, Providing and Laying approx. 11 lin. yd. of 42in. dia. O.G. Concrete Pipes; 159 lin. yd. of 27in. dia. S. and S. Concrete Pipes; 53 lin. yd. of 24in. dia. S. and S. Concrete Pipes; 245 lin. yd. of 18in. dia. O.G. Concrete Pipes; 325 lin. yd. of 15in. dia. S.G.W. Pipes; 101 lin. yd. 9in. dia. S.G.W. Pipes; together with 6in. dia. Gully Connections, Gullies, Precast Concrete and Brick Manholes, and other ancillary works.

The documents and Drawings are being prepared, and Application for copies of the Specification, Bills of Quantities and further instructions, etc., should be addressed to the Borough Engineer, Municipal Buildings, Gillingham, Kent, accompanied by a deposit cheque for £2 2s., returnable on receipt of a bona-fide Tender not subsequently withdrawn.

The completed Tender must be delivered to the undersigned by First Post on MONDAY, the 22nd August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

(Signed) FRANK HILL,
Town Clerk.

BOROUGH OF HORNSEY.

CAMPSBOURNE REDEVELOPMENT AREA—STAGE IV.

HOUSING SCHEME NO. 62.

TENDERS are invited for the ERECTION of 53 FLATS and MAISONNETTES in FOUR BLOCKS in MYDDETON ROAD and CAMPSBOURNE ROAD, Hornsey, N.8.

Particulars and Form of Tender from the Borough Engineer and Surveyor, Town Hall, Hornsey, N.8.

Applications for Tender documents to be received by Noon on FRIDAY, 12th August, 1960.

Tenders to be submitted by Noon on MONDAY, the 26th September, 1960.

W. B. MURGATROYD,
Town Clerk.

LEATHERHEAD URBAN DISTRICT COUNCIL.

TENDERS are invited for the LAYING of approx. 590yd. of a 6in. SOIL SEWER using PITCH FIBRE PIPES.

Tender documents may be obtained, and Plans inspected, at the Red House, Leatherhead.

Tenders to be delivered by Noon on WEDNESDAY, DAY, 10th August, to the undersigned.

EDE,
Council Offices,
Bull Hill,
Leatherhead.

DORKING URBAN DISTRICT COUNCIL.

TENDERS will shortly be invited from a short list of contractors, for the REPAVING of approx. 3,500 sq. yd. of SLAB PAVED FOOTWAY.

Experienced contractors are now invited to submit their names for consideration.

Acceptance by letter, in envelopes endorsed "Footpath Paving," should reach the undersigned not later than 12 Noon on MONDAY, 8th August, 1960.

F. G. SUTHERLAND,
Clerk of the Council.

Pippbrook,
Dorking, Surrey.
19th July, 1960.

CONGLETON RURAL DISTRICT COUNCIL.

ROADS AND SEWERS—MOUNT PLEASANT,
ODD RODE.

The Council invites TENDERS for the CONSTRUCTION of 300 lin. yd. of 36in. wide STREET, together with Surface Water and Soil Sewer.

Specifications, Bill of Quantities and Form of Tender may be obtained on application to the Engineer and Surveyor upon payment of a deposit of Two Guineas, which will be returned on receipt of a bona-fide Tender not subsequently withdrawn and the return of the Tender documents and Plans supplied by the Council.

Acceptance of a Tender will be subject to the approval of the Ministry of Housing and Local Government, and the Council do not bind itself to accept the lowest or any Tender.

Tenders should reach the CLERK OF THE CONGLETON R.D.C., Middlewich Road, Sandbach, not later than 10 a.m. on WEDNESDAY, 10th August, 1960, endorsed "Roadworks."

19th July, 1960.

A MERSHAM RURAL DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

IMPROVEMENTS TO 22 COUNCIL HOUSES AT
PENFOLD COTTAGES, HOLMER GREEN, BUCKS.

TENDERS are invited from experienced builders and plumbers for the INSTALLATION of HOT WATER SYSTEMS and the LAYING of PATENT LINOLEUM TILES to EXISTING CONCRETE FLOORS in 22 HOUSES. To 12 of the houses the lining of plaster lath ceilings is also required.

Specifications, Bills of Quantities, General Conditions and Particulars, Tender may be obtained from MR. J. GODBHERE, A.M.I.Mun.E., Engineer and Surveyor, Amersham Rural District Council, 42 High Street, Amersham, Bucks., on payment of a sum of £2 2s., which will be returned on receipt of a bona-fide Tender.

Tenders should be returned to the undersigned not later than 12 Noon on FRIDAY, 12th August, 1960, in a sealed envelope, which will be supplied appropriately endorsed.

The Council does not bind itself to accept the lowest or any Tender.

H. E. BUXTON,
Clerk of the Council.

42 High Street,
Amersham,
Bucks.

The Grove,
Shifnal,
Shropshire.

CONTRACTS

BOROUGH OF BRIDPORT.

DEMOLITION AND CLEARANCE OF HOUSES AND BUILDINGS.

The COUNCIL are prepared to consider TENDERS for the DEMOLITION of PROPERTIES and CLEARANCE of an AREA comprising 73-79 West Allington, 1-5 Dublin Passage, 1-9 Magdalen Lane, together with ancillary works.

Form of Tender, Specification and Schedule of Works may be obtained by application in writing, together with a deposit of £100 (One Guinea), returnable upon receipt of a bona-fide Tender from the Borough Engineer, Municipal Offices, South Street, Bridport, at whose Office a Plan may be inspected.

Tenders, in plain sealed envelope endorsed "Demolition—Magdalen Lane," to be delivered to the undersigned not later than FRIDAY, 26th August, 1960.

The Council are not bound to accept the lowest or any Tender.

F. C. M. FORWARD,

Municipal Offices,
Bridport.

Town Clerk.

BOURNE URBAN DISTRICT COUNCIL.

LAYING OF SEWERS.

TENDERS are invited from experienced contractors for the LAYING of approx. 2,000yd. of 12in., 9in. and 6in. dia. FOUL SEWERS in WEST STREET, BURGHLEY STREET, WHARF LANE, ST. PETER'S ROAD, and VARIOUS VIEWS, and about 1,000yd. of 12in., 9in. and 6in. dia. SURFACE WATER SEWERS in the GLADSTONE STREET and KINGSWAY AREAS, together with Manholes, House Connections and other ancillary Works.

Drawings may be seen at the offices of the Council's Consulting Engineers, MESSRS. PICK, EVERARD, KEAY AND GIMSON, 6 Millstone Lane, Leicester, from whom the Specification and Bill of Quantities may be obtained on payment of a deposit of Five Guineas, which will be refunded on receipt of a bona-fide Tender and the return to the Engineers of documents supplied. Key Plans may also be seen at the Council Offices.

Tenders, on the loose form and in the envelope provided, are to be delivered to the undersigned not later than 10 o'clock in the Forenoon on SATURDAY, 27th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

D. REESON,

Council Offices,
64 North Street,
Bourne, Lincs.

Clerk of the Council.

BOURNE URBAN DISTRICT COUNCIL.

SOUTH STREET CAR PARK.

TENDERS are invited from experienced contractors for the CONSTRUCTION of approx. 2,200 sq. yd. of REINFORCED CONCRETE CAR PARKING AREA, together with a Concrete Culvert, Brick Boundary Wall, Kerbing, Draining and other ancillary Works.

Drawings may be seen at the offices of the Council's Consulting Engineers, MESSRS. PICK, EVERARD, KEAY AND GIMSON, 6 Millstone Lane, Leicester, from whom the Specification and Bill of Quantities may be obtained on payment of a deposit of Five Guineas, which will be refunded on receipt of a bona-fide Tender and the return to the Engineers of documents supplied. Key Plans may also be seen at the Council Offices.

Tenders, on the loose form and in the envelope provided, are to be delivered to the undersigned not later than 10 o'clock in the Forenoon on SATURDAY, 27th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

D. REESON,

Council Offices,
64 North Street,
Bourne, Lincs.

Clerk of the Council.

NEWTON ABBOT RURAL DISTRICT COUNCIL.

AUGMENTATION OF WATER SUPPLY.

CONTRACT NO. 1.

The Council invite FIXED-PRICE TENDERS from contractors experienced in this class of work for the PROVIDING and LAYING of about Eight Miles of ASBESTOS-CEMENT PIPES varying from 3in. to 6in. internal dia.; also the CONSTRUCTION of a BOOSTER STATION and a MASS CONCRETE RESERVOIR of 50,000 gallons capacity, together with all ancillary works etc.

Copies of the Specification, Bill of Quantities and Form of Tender may be obtained from the Council's Consulting Engineers, MESSRS. HARVEY, MCGILL AND HAYES, 8 Richmond Road, Exeter, on payment of a deposit of £5 (One Guinea), which will be refundable on receipt of a bona-fide Tender not subsequently withdrawn, and on the receipt of all documents and Drawings, etc.

Sealed Tenders, accompanied by the Bill of Quantities, drawn up in ink and endorsed "Water Supply—Contract No. 1," but bearing no name or mark identifying the sender, are to be delivered to the undersigned not later than 10 a.m. on WEDNESDAY, 7th September, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

W. SADLER,

Council Offices,
Kingsteignton, Road,
Newton Abbot,
Devon.

20th July, 1960.

NEWCASTLE UPON TYNE EDUCATION COMMITTEE.

HEATON GRAMMAR AND HIGH SCHOOLS, EXTENSIONS II.

TENDERS are invited for the ERECTION of FURTHER EXTENSIONS and ALTERATIONS to these SCHOOLS. The Work consists of the Erection of a New Gymnasium Block and Remodelling in the Existing Buildings, Provide New Kitchen and Dining Facilities. The successful contractor will be required to phase the work so as to avoid interference with the operation of the schools.

Building contractors experienced in this type of work who desire to tender, should apply to the City Architect, 19th Floor, Market, Newcastle upon Tyne, 1, within 14 days of the appearance of this advertisement, for Bills of Quantities.

The Education Committee do not bind themselves to accept the lowest or any Tender.

JOHN ATKINSON,

Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
20th July, 1960.

CONTRACTS

BOROUGH OF NEWBURY.

SEWAGE TREATMENT WORKS AND PUMPING STATION.

N16/1 CONTRACT NO. 1.

FIRM-PRICE TENDERS are invited for the CONSTRUCTION of the FOLLOWING REINFORCED CONCRETE and OTHER STRUCTURES to form a new Crude Sewage Pumping Station at LONDON ROAD, and Extensions to the existing Sewage Treatment Works:

A Pumping Station and Well, approx. 50ft. x 30ft. x 23ft. deep.

An Inlet Works with Two Committor Chambers and One Detritor Tank.

Three 63ft. dia. Sedimentation Tanks.

One 45ft. dia. Human Tank.

Earth Bank Sludge Lagoons.

Pipes, Chambers and ancillary works.

Particulars, Specifications and Plans can be inspected at the Offices of the Borough Surveyor, Municipal Buildings, Newbury, and the Consulting Engineers, MESSRS. HOWARD HUMPHREYS AND SONS, Victoria Station House, Victoria Street, Westminster, S.W.1, and from TUESDAY, 1st August, 1960, until FRIDAY, 26th August, 1960.

Tender documents can be obtained from the Consulting Engineers on payment of a deposit of Five Guineas made payable to the Council, returnable for bona-fide Tender not subsequently withdrawn.

No Tender, consideration unless it is submitted on the official form and delivered to the undersigned not later than FRIDAY, 16th September, 1960, in a plain sealed envelope endorsed "Tender for London Road Pumping Station and Sewage Treatment Works—Contract No. 1," but bearing no indication of the sender.

The Council do not bind themselves to accept any Tender.

LESLIE SOUTHERN, LL.B.

Town Clerk.

BOROUGH OF HENDON.

TENDERS FOR SUPPLIES.

The BOROUGH COUNCIL invite TENDERS for the supply of VARIOUS MATERIALS for the period ending 30th September, 1961, as follows:—

(1) Castings.

(2) Portland Cement, etc.

(3) Brushes for Lewin Mechanical Sweepers.

(4) Protective Clothing and Boots.

(5) Paints, Cleaning Materials.

(6) Electrical Fittings.

(7) Precast Concrete Flagstones.

(8) Tarmacadam, Bituminous Macadam and Cold Asphalt.

(9) Sling, Sand and Ballast.

(10) Granite Chippings.

(11) Diesel Oil for Stationary Boilers and Road Vehicles.

(12) Motor Lubricating Oils and Petrol.

(13) Scavenger Brooms.

(14) Footpath Repair Works (Kerb and Artificial Stone Paving).

(15) Footpath Repair Works (Fine Cold Asphalt, etc.).

(16) Carrigaway Repair Works (Asphalt, Tar-macadam, etc.).

Specifications, terms of Tender and other particulars may be obtained from the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, and the Form of Agreement and General Conditions of Contract may be inspected at the Town Hall at any time during office hours.

A Tender, endorsed "Annual Tender No. ____" to be forwarded in the envelope provided, not later than Noon on MONDAY, 22nd August, 1960, and the envelope shall not bear any name or mark indicating the sender. Tenders received after this date and time will not receive consideration.

The Council do not bind themselves to accept the lowest or any Tender.

R. H. WILLIAMS.

Town Clerk.

CARLTON URBAN DISTRICT COUNCIL.

PHENIX FARM ESTATE, SITE 36, SCHEME 91.

PROPOSED ERECTION OF 24 HOUSES.

TENDERS are invited for the ERECTION of 24 HOUSES, together with incidental Works, at the ABOVE SITE.

The Site has been prepared with roads and sewers, and this is the area for building work.

Drawings and General Conditions of Contract may be inspected at the office of the Engineer and Surveyor, E. C. KIRK, ESQ., F.R.I.C.S., A.M.I.C.E., M.I.M.U.N.E., during normal office hours, from whom Form of Tender and Bill of Quantities may be obtained on payment of a deposit of £2. The deposit will be refunded on receipt of a bona-fide Tender not subsequently withdrawn and of the return of all the documents supplied.

Tenders, in a plain sealed envelope endorsed "Phenix Farm Estate Contract," must be delivered to the undersigned not later than 10 a.m., WEDNESDAY, 10th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

A. E. F. WALKER,

Council House,
Burton Road,
Carlton,
Near Nottingham.
20th July, 1960.

SIDMOUTH URBAN DISTRICT COUNCIL.

SEA OUTFALL.

TENDERS are invited from experienced firms for the LAYING of a 36in. dia. SEWER OUTFALL, extending 1,500ft. seaward of high water, either in Cast-Iron on Trestles or in Welded Steel Pipe on the sea bed.

Particulars, on application, by 15th AUGUST, from Messrs. Lewis and Duvivier, 14 Howick Place, London, S.W.1.

ERIC G. HOWARTH.

Clerk of the Council.

WARWICKSHIRE CONSTABULARY.

TENDERS are invited for the SUPPLY of UNIFORM CLOTHING, etc., for the year 1961.

Form of Tender and Particulars will be forwarded on application to the Chief Constable, Chief Constable's Office, P.O. Box No. 4W, Warwick, by whom Tenders must be received on or before 3rd SEPTEMBER, 1960.

P. E. BRODIE,

Chief Constable.

THE CONTRACT JOURNAL.

SUPPLEMENT.

Building contractors experienced in this type of work who desire to tender, should apply to the City Architect, 19th Floor, Market, Newcastle upon Tyne, 1, within 14 days of the appearance of this advertisement, for Bills of Quantities.

The Education Committee do not bind themselves to accept the lowest or any Tender.

JOHN ATKINSON,

Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
20th July, 1960.

CONTRACTS

CONTRACTS

DURHAM COUNTY COUNCIL.

TENDERS are invited for the SUPPLY of: Two WATER CARTS; One AIR COMPRESSOR; Six MECHANICAL GULLY EMPTIES; One CRAWLER TRACTOR SHOVEL; Two WATER PUMPS; 20 SNOW-PLOUGH; Two Pneumatic POKER VIBRATORS; Four LIGHT DUMP TRAILERS; Four GRITTER BODIES; Seven INDUSTRIAL TRACTORS with Attachments; One KERB DRESSER; One VERGE TRIMMER. Tenders, in plain sealed envelopes, endorsed "Tender for Large Plant," are to reach the undersigned not later than Noon on FRIDAY, 12th August, 1960. The Council do not bind themselves to accept the lowest or any Tender.

J. K. HOPE,
Shire Hall,
Durham.

BOROUGH OF STAFFORD.

EASTERN AREA WATER SCHEME.

SECTION NO. 5.

FIXED-PRICE TENDERS are invited from responsible and experienced civil engineering contractors, for the PROVISION and LAYING of a 1,000ft. long section of 4in. dia. and 1,600yd. of 5in. dia. SPUN-IRON PIPES WATER MAINS in the Parishes of SALT AND ENSON, MARSTON, WHITGREAVE and CREWELL, the Stafford Rural District.

Plans, Specifications and Bills of Quantities may be seen at the Offices of the Council's Consulting Engineers, MESSRS. ELLIOTT AND BROWN, Stanley House, Pelham Road, Nottingham, and copies of the Bills of Quantities and Form of Tender may be obtained from them on deposit of £5 5s. (by cheque, payable to the Stafford Corporation), which will be returned on receipt of bona-fide Tender, not afterwards withdrawn, and the return of all documents loaned to the contractor within seven days notice informing him that a Tender has been accepted.

Tenders, in plain sealed envelopes endorsed "Eastern Area Water Scheme, Section No. 5," to be delivered to the undersigned not later than 9 a.m. on FRIDAY, 26th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

Acceptance of Tender will be subject to the final approval of the Ministry of Housing and Local Government and submission of an estimate based on a provisionally accepted Tender. The contractor will be required to commence work immediately such approval is received.

T. BROUGHTON NOWELL,

Town Clerk.

Borough Hall,
Stafford.

22nd July, 1960.

BARNESLEY CORPORATION WATERWORKS.

MECHANICAL PLANT STORE.

SCOUT DIKE, PENISTONE.

FIXED-PRICE TENDERS are invited from experienced building contractors for the CONSTRUCTION of the ABOVE, a Two-storey Building (approx. 50,000 cu. ft.), in Imitation Stuccoed Walling.

Applications for Tender documents must be accompanied by details of similar work executed together with a deposit of Two Guineas, which will be returned upon receipt of bona-fide Tender and return of all the documents supplied. The Tender documents may be obtained from the Waterworks Engineer and Manager, Town Hall, Barnsley.

Tenders, on a plain sealed envelope marked "Tender—Plant Store, Scout Dike," not later than the First Post on MONDAY, the 22nd August, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

A. E. GILFILLAN,

Town Clerk.

Town Hall,
Barnsley.

July, 1960.

BARNESLEY CORPORATION WATERWORKS.

CONSTRUCTION OF MOSSLEY SERVICE RESERVOIR.

ROOFING OF CROSS ROYD SERVICE RESERVOIR.

The Council invites TENDERS, on a FIXED PRICE BASIS, from contractors experienced in this type of WORK.

The Work is in the vicinity of Penistone, and consists of (a) the Construction of a 400,000-gallon Service Reservoir; and (b) the Roofing of an existing 500,000-gallon Service Reservoir, using Prestressed Concrete Beams, all in accordance with the Drawings, Specification, Bill of Quantities and Conditions of Contract, at present in course of preparation.

Applications for the Waterworks Engineer and Manager, Town Hall, Barnsley, and are to be accompanied by a deposit of Five Guineas, which will be returned upon receipt of all the documents and a bona-fide Tender not subsequently withdrawn and also the name and address of the Engineer under whose direction similar work has been carried out.

The closing date for Tenders will be fixed at the time the Tender documents are sent out. The time allowed for pricing will be approximately four weeks.

The Corporation do not bind themselves to accept the lowest or any Tender.

A. E. GILFILLAN,

Town Clerk.

Town Hall,
Barnsley.

July, 1960.

TRENT RIVER BOARD.

RIVER TRENT—NOTTINGHAM.

VICTORIA EMBANKMENT REMEDIAL WORKS.

TENDERS are invited for WORK to be carried out on the NORTH BANK of the RIVER TRENT between Wilford Toll Bridge and a point approx. 500yd. downstream of it.

The work comprises the Demolition of approx. 230 lin. yd. of Old and Damaged Concrete River Steps, and the Removal of Timber Cut-off Piles, the Driving of approx. 430 lin. yd. of 19ft. long Steel Sheet Piles, and the Construction of Concrete Steps and Capping Beams involving about 1,120 cu. yd. of Concrete.

Contract documents are obtainable from the Engineer, Trent River Board, 206 Derby Road, Nottingham, on payment of a deposit of £5 (cheque to be made payable to the Trent River Board), which will be refunded only on receipt of a bona-fide Tender, which is not subsequently withdrawn, and the return of Contract documents.

Applications for documents must be received not later than Noon on the 15th AUGUST, 1960.

IAN DRUMMOND,

Clerk of the Board.

July 28 1960

CONTRACTS

WILTSHIRE COUNTY COUNCIL.

TENDERS invited for the FOLLOWING WORKS:

- Tree Felling, Construction of Walls, and Fencing, on Trunk Road A.303, east of B.3092 Junction, Mere.
- Tree Felling, Construction of Footpath, and Fencing, at Farm Lane, Rudloe, near Cheltenham.
- Earthworks, Carriageway Widening, Fencing and appurtenant works, at Broad Chalke, Salisbury:
 - Primrose Cottage;
 - Knapp;
 - The Church.

Contractors may apply for either, or all, of items (a), (b) and (c). Relevant documents obtainable from County Surveyor, County Hall, Trowbridge, on payment of £2 deposit per item, returnable on receipt of a bona-fide Tender. Drawings may be inspected, by appointment, at the above address.

Tenders, in envelopes provided, bearing no name or mark indicating origin, returnable by 5 p.m. on 29th AUGUST, 1960.

P. A. SELBORNE STRINGER,
Clerk of the County Council.

COUNTY COUNCIL OF DURHAM.

TENDERS invited for SUPPLY of the FOLLOWING:

- Stationery.
- Bedding and Linen.
- Catering Equipment to Neville's Cross College.

Details from undersigned. Tenders by 19th AUGUST, 1960.

G. H. METCALFE,
Director of Education.

Shire Hall,
Durham.

18th July, 1960.

COUNTY BOROUGH OF EAST HAM.

FENCING.

TENDERS are invited for the SUPPLY and ERECTION of 890yd. of GALVANISED TUBULAR STEEL FENCING to the CENTRAL RESERVATION of the EAST HAM and BARKING BY-PASS ROAD.

Form of Tender, Specifications for the contract may be obtained from BRIDGEHEAD ENGINEER, Town Hall, 16, upon receipt of a deposit of £2 2s. Tenders to be returned by not later than 12 Noon on 15th AUGUST, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

CITY OF MANCHESTER.

TENDERS invited for ELECTRICAL INSTALLATION to EXTENSIONS at WHALLEY RANGE HIGH SCHOOL.

Specification and Drawings from CITY ARCHITECT, P.O. Box 488, Town Hall.

Tenders returnable by 12th AUGUST.

CITY OF CAMBRIDGE.

LAMMAS LAND PADDLING POOL,
COLDHAMS COMMON SWIMMING POOL.

FIXED-PRICE TENDERS are invited for ONE or MORE of the FOLLOWING CONTRACTS:

(1) Erection of a Purification Plant House and a small Sewage Pumping Station of approx. 600 sq. ft. plan area.

(2) Provision and Laying of approx. 330 lin. yd. of 5in. dia. Class "B" Asbestos-Cement Rising Main.

COLDHAMS COMMON SWIMMING POOL:

(3) Erection of a Purification Plant House of approx. 1,100 sq. ft. in floor area.

Forms of Tender, Specifications and contract documents may be obtained from the City Engineer and Surveyor, The Guildhall, Cambridge, on payment of a deposit of Two Guineas for each contract, which will be refunded on receipt of a bona-fide Tender. The documents will be issued on the 12th AUGUST, 1960, and must be submitted by MONDAY, 12th September, 1960.

The Council is not bound to accept the lowest or any Tender.

ALAN H. I. SWIFT,
Town Clerk.

The Guildhall,
Cambridge.

CITY OF LEICESTER.

KNIGHTON ROAD (PART) IMPROVEMENT.

RECONSTRUCTION OF CARRIAGeway,
FOOTWAYS, AND MISCELLANEOUS WORKS.

TENDERS are invited from contractors experienced in similar works, for the FOLLOWING:

700 sq. yd. Lean Mix Concrete Carrigeway.
1,500 sq. yd. Bitumen Macadam Surfacing to Carrigeway.

1,700 sq. yd. Bitumen Macadam Footways.
100 sq. yd. 9in. Brickwork Boundary Wall; together with Site Clearance and Accommodation Works.

Full details and Forms of Tender are available from the undersigned on payment of One Guinea, refundable on receipt of a bona-fide Tender.

Tenders to be returned in the official envelope provided by 4.30 p.m. on WEDNESDAY, 17th August, 1960.

JOHN L. BECKETT, M.I.C.E.,
City Surveyor.

Town Hall,
Leicester.

HERNE BAY URBAN DISTRICT COUNCIL.

WEST END ESTATE.

CLARE DRIVE (PART): BLEAN VIEW ROAD (PART):
FIFE ROAD (PART): BLACKBURN ROAD (PART).

TENDERS are invited for the MAKING-UP of the ABOVE ROADS under the Street Works Code, 1892, as incorporated in the Highway Act, 1959.

The work includes 190 lin. yd. of Surface, approx. 4,878 sq. yd. of Reinforced Concrete Road Slab; and approx. 4,057 sq. yd. of Tarmacadam Footpaths; plus all ancillary works.

Bills of Quantities, Specification and Form of Contract and Drawings may be seen at the Office of the Engineer and Surveyor, Council Offices, Herne Bay.

Tenders must be returned to the undersigned, in the endorsed envelope provided, not later than 12 Noon on SATURDAY, 20th August, 1960.

G. A. BAGNALL,
Clerk of the Council.

Council Offices,
Herne Bay.

CONTRACTS

DURHAM COUNTY COUNCIL.

TENDERS are invited for the SUPPLY and DELIVERY of BUILDING BRICKS, HEDGING PLATE, and GRASS SEEDS, PLASTIC WHITE LINE MATERIAL, SALT for Snow Melting, STEEL WIRE FABRIC for Reinforcement, TOOLS and STORES, TIMBER, BOLTS and NUTS, WOOD SCREWS and AUTOMOBILE LAMP BULBS.

Further particulars may be obtained from the County Engineer and Surveyor, Aykley Heads, Durham.

Tenders, in plain sealed envelopes endorsed "Tender for _____," are to be delivered to the undersigned not later than Noon on FRIDAY, 19th August, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

COUNTY BOROUGH OF SUNDERLAND.

CAR PARK—NILE STREET.

TENDERS are invited for the ABOVE WORK, comprising 1,700 sq. yd. of Hardcore and other Materials.

Particulars and Form of Tender may be obtained from the Borough Engineer, 27, Fawcett Street, Sunderland, on payment of £2 2s., refundable on receipt of a bona-fide Tender.

Sealed Tenders, endorsed "Car Park—Nile Street," must be addressed to me and received at my Office, Town Hall, by 16th AUGUST, 1960.

G. S. MCINTIRE,
Town Clerk.

BOROUGH OF WALTHAMSTOW.

ENGINEER AND SURVEYOR'S DEPARTMENT.

HIGH STREET IMPROVEMENT.

Tenders are invited for the SURFACING of APPROX. 8,600 sq. yd. of existing CONCRETE CARRIAGeway with a SINGLE COURSE HOT ROLLED ASPHALT KERB DRESSING and the Re-laying of existing Paved Footways, and other incidental works.

Tender documents may be obtained from the Borough Engineer and Surveyor upon payment of a deposit of Two Guineas, returnable in respect of a bona-fide Tender, subsequently withdrawn.

Drawings and Conditions of Contract may be inspected during office hours.

Sealed Tenders, in the envelopes provided, must be received by the undersigned not later than 12 Noon on WEDNESDAY, 24th August, 1960.

No Tender will be accepted unless there are any mark indicating the identity of the sender, will be considered.

G. A. BLAKELEY,
Town Clerk.

BOROUGH OF ROMFORD.

RESURFACING—A.118 MAIN ROAD.

TENDERS are invited for the RESURFACING of MAIN ROAD between PETTITS LANE and HEATH DRIVE, involving the Taking-up and Re-laying of APPROX. 1,800 lin. yd. of Kerb, 4,000 sq. yd. of Slab Paving, 3,500 sq. yd. of Macadam Footway, and 9,000 sq. yd. of Carrigeway Surfacing with 1½in. Hot Rolled Asphalt, together with Regulating and Base Course, and various ancillary works.

Contract documents, obtainable from the Borough Engineer and Surveyor, Town Hall, Romford, on deposit of cheque for £2 2s., returnable on receipt by me of a bona-fide Tender in the envelope provided by 15th AUGUST.

JOHN E. SYMONS,
Town Clerk.

Town Hall,
Romford.

MALMESBURY BOROUGH COUNCIL.

CONSTRUCTION OF SWIMMING POOL.

The above Council invite TENDERS on a Fixed-Basis, for the CONSTRUCTION of a REINFORCED CONCRETE SWIMMING POOL 100ft. x 40ft. with ancillary works and services, on a site near ALEXANDER ROAD, Malmesbury.

Plans, Specifications and Form of Tender may be obtained on application to the Borough Surveyor, Town Hall, Malmesbury, Wilts., on payment of Five Guineas deposit, which will be returned on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, in plain sealed envelopes endorsed "Swimming Pool—Malmesbury," must be delivered to the undersigned not later than the 27th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

F. J. WESTON,
Town Clerk.

Town Hall,
Malmesbury, Wilts.

27th July, 1960.

WYCOMBE RURAL DISTRICT COUNCIL.

EXTENSION TO PRINCES RISBOROUGH SEWAGE DISPOSAL WORKS.

The above-mentioned Council invites TENDERS for the EXECUTION of WORKS, comprising the CONSTRUCTION of SEWAGE DISPOSAL WORKS EXTENSION, consisting of Sedimentation Tank, Percolating Filters, Humus Tanks, Sludge Digestion Tanks and Drying Beds, Sludge Pumping Stations, Spun-Iron Pumping Mains, etc., and other appurtenant works, together with the Re-laying of about 600yds. of 15in. to 6in. Concrete and Stoneware Sewers.

Contractors desirous of tendering are requested to send their names and addresses to MESSRS. D. BALFOUR AND SONS, M.I.C.E., Consulting Engineers, 131, Victoria Street, Westminster, S.W.1, accompanied by a cash deposit of £10, made payable to the Wycombe Rural District Council, and later than 9th AUGUST, 1960, after which full particulars will be forwarded. The deposit will be returned on receipt of a bona-fide Tender and on return of all printed forms and plans after the Contract is let.

It is essential that the contractor shall have had considerable experience in similar work and be prepared to furnish security with an approved society for the fulfilment of the Contract.

Tenders, in plain sealed envelope endorsed "Tender for Princes Risborough Sewage Disposal Works," must be sent to the undersigned by a date to be given by the Engineers.

The lowest or any Tender will not necessarily be accepted by the Council.

L. C. RYSDALE,
Clerk of the Council.

17 High Street,
High Wycombe,
Bucks.

CONTRACTS

BEDFORDSHIRE COUNTY COUNCIL.

LONDON-EDINBURGH-THURSO TRUNK ROAD ROUTE A.1 LANGFORD ROAD TO "THE PLOUGH"—WEST CARRIAGEWAY.

TENDERS are invited for the REMOVAL of approx. 3,000 sq. yd. of old MATERIAL, REGULATING with GRAVEL, ASPHALT, and RESURFACING with GREAT NORTH ASHALT on the ABOVE SECTION of the GREAT NORTH ROAD.

Tender documents may be obtained from the County Surveyor, Dents Road, Bedford, on payment of a deposit of £2, returnable on receipt of a bona-fide Tender, which must be delivered to the undersigned on FIRST FRIDAY, 8th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

GEORGE BREWIS,
Clerk of the County Council.

Shire Hall,
Bedford.

July, 1960.

COUNTY BOROUGH OF IPSWICH.

BRAMFORD ROAD/HENNIKER ROAD AREA.

SURFACE WATER DRAINAGE SCHEME.

FIXED PRICE TENDERS are invited for the CONSTRUCTION of approx. 1,150 lin. yd. of SURFACE WATER SEWERS in strengthened pipes between 30in. and 15in. dia.; approx. 270 lin. yd. of SURFACE WATER SEWERS in plain Concrete Pipes between 12in. and 6in. dia., together with Manholes, Gullies and other incidental works.

From TUESDAY, 1st August, 1960. Drawings and subsoil information may be inspected at the Office of the Borough Engineer, 19, Tower Street, Ipswich, from whom Tender documents may be obtained on payment of a deposit of £5 5s., returnable on receipt of a bona-fide Tender.

Tenders, in plain sealed envelopes, bearing the words "Tender for Bramford Road, Heniker Road Drainage," but with no mark to indicate the sender, must be received by me not later than First Post on THURSDAY, 1st September, 1960.

The Council does not bind itself to accept the lowest or any Tender.

J. C. NELSON,
Town Clerk.

Town Hall,
Ipswich.

BOROUGH OF ALTRINCHAM.

MAIN SEWERAGE.

CONTRACT NO. 3.

The CORPORATION propose to obtain TENDERS for the CONSTRUCTION of MAIN SEWERAGE WORKS comprising the Laying of about 4,100ft. of Concrete Tube Sewers varying from 45in. to 9in. dia., with Manholes and other appurtenant works. The works also include Laying Deep Sewers in wet sand under an important railway junction, the work being carried out in steel sheet piled trench over a length of about 250ft. to the special requirements of the British Transport Commission.

Tenders will only be considered from firms having had similar experience and who have adequate special plant and skilled staff.

Firms desirous of tendering are invited to send full particulars of their experience to the CORPORATION CONSULTING ENGINEERS, BALFOUR AND SONS, Consulting Engineers, 131 Victoria Street, London, S.W.1.

The closing date for submission of tenders is 13th AUGUST, 1960.

Contractors will be notified in due course as to the availability of Tender documents. The latest date for the submission of Tenders is 17th OCTOBER, 1960.

E. GRAHAM THOMAS,
Town Clerk.

BOROUGH OF WATFORD.

STREET LIGHTING ON NORTH ORBITAL ROAD. (A.405). WATFORD.

TENDERS are invited for the SUPPLY and ERECTION of 93 SODIUM LANTERNs on CONCRETE COLUMNS on the NORTH ORBITAL ROAD (A.405), Watford.

Applications for documents, accompanied by a deposit of £2 2s., which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn, must be made to Mr. F. C. SAGE, Borough Engineer and Surveyor, Town Hall, Watford, not later than 2 p.m. on MONDAY, 8th August, 1960.

Contract documents will be forwarded as soon as possible after that date.

GORDON H. HALL,
Town Clerk.

Town Hall,
Watford.

CITY OF MANCHESTER.

ANCOATS REDEVELOPMENT AREA.

MILL STREET SITE.

TENDERS are invited for the CONSTRUCTION of 13.25 sq. yd. of CARRIAGeway, 2.275 lin. yd. of Bin-27in. dia. SEWER and CULVERT WORKS, and ancillary works.

Tender documents, returnable by 9.30 a.m. on 29th AUGUST, 1960, from the CITY SURVEYOR (Room 208), Town Hall, Manchester, 2.

CITY OF CAMBRIDGE.

COMMITTEE FOR EDUCATION.

PROPOSED PRIMARY SCHOOL, HISTON ROAD.

Building contractors are invited to TENDER for ERECTING the ABOVE SCHOOL, comprising 17 Classrooms, Assembly Hall, Small Assembly/Dining Hall, Kitchen, Administrative and Staff Rooms, Boiler House and Lavatories, including External Works in Roads, Paths, Playgrounds, Fencing, Boundary Walls and Gates and, provisionally, a Caretaker's Cottage and Small Staff accommodation.

The school building is single-storey, constructed of load-bearing brick walls on strip foundations and light-weight timber construction roof. The floor area is about 17,300 sq. ft.

Applications for Bills of Quantities and Tender documents, together with a deposit of £2 2s., returnable on receipt of a bona-fide Tender, should be sent to the City Surveyor, Guildhall, Cambridge, not later than FRIDAY, 5th August.

Documents will be issued on 9th August, and a Fixed-price Tender must be submitted by Tuesday, 6th September, 1960.

ALAN H. I. SWIFT,
Town Clerk.

The Guildhall,
Cambridge,
8th July, 1960.

CONTRACTS

DENBIGHSHIRE COUNTY COUNCIL.
ROUTE A.539—RECONSTRUCTION OF
WENFRWD BRIDGE.

TENDERS are invited from contractors experienced in reinforced concrete construction and in roadworks, for the DEMOLITION of the EXISTING BRIDGE, for the CONSTRUCTION of a NEW BRIDGE of 24ft. skew span, and for the RELEVELLING of approach, a TANDEM ROAD, for DIVERTING a CULVERT, and for sundry Accommodation Works including the Erection of a Domestic Garage.

Copies of the Tender documents may be obtained from the County Surveyor, 41 Clwyd Street, Ruthin, on payment of Ten Guineas, which will be returned on receipt of a bona-fide Tender.

Completed Tender documents must be submitted to the undersigned, in an envelope endorsed "Tender for the Reconstruction of Wenfrwd Bridge," and bearing no indication of origin, not later than FRIDAY, 26th August, 1960.

W. E. BUTTON,
Clerk of the County Council.

County Offices,
Ruthin.

ISLINGTON BOROUGH COUNCIL.

TENDERS are invited for the DEMOLITION of an existing GREENHOUSE at the Council's Cemetery, East Finchley, N.2, and the CONSTRUCTION of a NEW GREENHOUSE.

Tender documents available from the BOROUGH ENGINEER AND SURVEYOR, Town Hall, Upper Street, N.1, are returnable by TUESDAY, 23rd August, 1960.

CITY OF BIRMINGHAM.
TO BUILDING CONTRACTORS.

CONTRACT 704—EIGHT 2-STORY DWELLINGS—GLEBE FARM ROAD, STECHFORD.

CONTRACT G.18/57—23 LOCK-UP GARAGES—FELSTONE ROAD, KINGSTANDING.

CONTRACT G.18/57—98 LOCK-UP GARAGES—BARTLEY GREEN, HARBORNE AND NORTH FIELD AREAS.

CONTRACT G.18/111—10 LOCK-UP GARAGES—KINGSBURY ROAD, ERDINGTON.

The HOUSEBUILDING COMMITTEE invite FIRM-PRICE TENDERS for the ERECTION of the above.

Bills of Quantities and Forms of Tender will be forwarded on payment of £2 2s. for each Contract at the Office of A. G. SHEPPARD FIDLER, City Architect, Civic Centre, Birmingham, 1, or by post. All cheques should be made payable. Applications should be made by 3rd AUGUST, 1960. Conditions of Contract (which include the usual Fair Wages and Conditions of Labour Clause) may be seen at the City Architect's Office during normal working hours.

The deposits will be returned on receipt of bona-fide Tender or on notification of intention to tender together with the return of the documents not later than three days before the date for receipt of tenders.

Tenders, enclosed in the envelopes provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, not later than 12 Noon on FRIDAY, the 28th September, 1960. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON,
Town Clerk.

Council House,
Birmingham, 1.

BINGHAM RURAL DISTRICT COUNCIL.
WHATTON SEWERAGE EXTENSIONS.

TENDERS are invited from experienced civil engineering contractors for the CONSTRUCTION of about 400yd. of 6in. dia. CONCRETE or STONEWARE PIPE SEWER 10ft. deep.

Plans, Specifications and Bills of Quantities may be seen at the Offices of the Council's Consulting Engineers, MESSRS. ELLIOTT AND BROWN, Chancery Lane, London, and copies of the Bill of Quantities may be obtained from them on deposit of Five Guineas (by cheque, payable to the Bingham R.D.C.), which will be refunded on receipt of a bona-fide Tender and afterwards withdrawn and the return of all documents loaned to the contractors, within seven days of notice informing him that a Tender has been accepted.

Tenders, endorsed "Whatton Sewerage," to be delivered in a plain sealed envelope to the undersigned not later than the First Post on 31st AUGUST, 1960.

The lowest or any Tender will not necessarily be accepted.

The work will be subject to the final approval of the Ministry of Housing and Local Government after submission of a revised estimate based on the provisional accepted Tender.

Under their previous contract carried out work under the supervision of Messrs. Elliott and Brown, contractors must submit with their application the names and addresses of two Engineers for whom they have carried out similar works recently, with brief details of the extent of the contracts.

W. B. BIRCH,
Clerk of the Council.

Council Offices,
Bingham,
Nottingham.
July, 1960.

ESSEX RIVER BOARD.
REINFORCED CONCRETE TIDAL WALL AT
TILBURY POWER STATION.

TENDERS will shortly be invited for the CONSTRUCTION of 485yd. of REINFORCED CONCRETE PARAPET WALL 6ft. 6in. high, on the western bank of the frontage of the TILBURY POWER STATION to the River Thames.

The Concrete Superstructure (approx. 1,000 cu. yds.) will be founded on about 150 12in. x 12in. x 65ft. long Greenheart Piles jointed at the centre. The greenheart for the piles will be supplied by the Board. The Contract will also include 12,000 cu. yds. of Excavation and the Driving of 130 tons of Steel Sheet Piling.

It is anticipated that the successful contractor will be able to start work within the next three months.

Contractors having a substantial organisation, and with considerable experience of piling, are invited to apply for inclusion in a panel of selected tenderers. Applications, together with a schedule of works of similar character recently carried out, should be sent to the Engineer, Essex River Board, Rivers House, New Writtle Street, Chelmsford, Essex, to arrive not later than the 6th AUGUST, 1960.

(Signed) W. J. S. BEW,
Clerk of the Board.

21st July, 1960.

CONTRACTS

METROPOLITAN BOROUGH OF
GREENWICH.NEW BRANCH LIBRARY—
BROOK LANE, KIDBROOKE, S.E.3.

APPLICATIONS are invited from those willing to TENDER for the ERECTION of a NEW BRANCH LIBRARY at Brook Lane, Kidbrooke, S.E.3.

Plans may be inspected at the Office of the Borough Engineer and Surveyor at the Town Hall, Greenwich High Road, S.E.10.

Selected applicants will be informed by post and will be supplied with Bills of Quantities and other documents referred to enable them to tender.

Tenders will be required to sign, or to refuse to sign, a certificate declaring that they are not parties to any scheme or arrangements with other tenderers in respect of the amount of, or the adjustment of, their Tender. The full wording of the certificate may be obtained from the undersigned.

Application must reach the Borough Engineer and Surveyor at the Town Hall by Noon on 30th AUGUST, 1960, and must include details of similar work undertaken recently.

G. C. TURK,
Town Clerk.

Town Hall,
Greenwich, S.E.10.
July, 1960.

BOROUGH OF FOLKESTONE.

SURFACING OF CARRIAGeway—
CORNWALLIS AVENUE AND SERVICE ROAD.
DOVER ROAD.

TENDERS are invited for the SURFACING of 4,700 sq. yds. CARRIAGeway with COAL ASPHALT WEARING COURSE, 1,800 sq. yds. DENSE TAR BASE COURSE, and 200 Tons DENSE TAR REGULATING COURSE.

Specification and Form of Tender may be obtained upon application to MR. L. ALLMAN, A.M.I.C.E., Borough Engineer, West Terrace, Folkestone.

Tenders, in plain sealed envelopes endorsed "Surfacing of Carriageways, 1960," must be addressed and delivered to the undersigned at the Town Clerk's Office, West Terrace, Folkestone, not later than the 10th AUGUST, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

N. C. SCRAGG,
Town Clerk.

Town Clerk's Office,
West Terrace,
Folkestone.
22nd July, 1960.

CITY OF LEICESTER.

QUOTATIONS are invited for CARRYING OUT MAINTENANCE REPAIRS and REINSTATEMENTS to COATED ASPHALT and ROCK ASPHALT ROAD SURFACES within the CITY OF LEICESTER. Further particulars and a brief Specification can be obtained from the undersigned.

Tenders to be returned, in the official envelope provided, to the undersigned not later than 4.30 p.m. on FRIDAY, 19th August, 1960.

JOHN L. BECKETT, M.I.C.E.,
City Surveyor.

Town Hall,
Leicester.

CITY OF MANCHESTER.

TENDERS invited for ALTERATIONS at HALL LANE POLICE STATION, WYTHENSHAWE. Specification and Drawing from CITY ARCHITECT, P.O. Box 288, Town Hall. Tenders returnable by AUGUST 16th.

BRACKLEY RURAL DISTRICT COUNCIL.

MAIN DRAINAGE OF LOWER MIDDLETON
CHENEY.

B24/15 CONTRACT 2.

The Brackley Rural District Council are prepared to receive TENDERS for the LAYING of approx. One Mile of Small-diameter SEWERS, the CONSTRUCTION of ATERIAL and HOUSE CONNECTIONS, and other ancillary works.

Particulars and Specifications may be obtained, and Plans may be inspected at the Offices of the Consulting Engineers, HOWARD HUMPHREYS AND SONS, Victoria Station House, Victoria Street, Westminster, S.W.1, on and after WEDNESDAY, 3rd August, 1960, until FRIDAY, 19th August, 1960, between the hours of 10 a.m. and 4 p.m., upon payment of cheque (made payable to the Rural District Council) for Three Guineas, which deposit, after the Council have reached a decision, will be returned to each contractor who has submitted a bona-fide Tender which is not subsequently withdrawn. The contractor must have had considerable experience in similar works and be prepared to furnish good and approved security for the due execution of the Contract.

Tenders are to be on the official form and are to be delivered to the undersigned, in a sealed envelope endorsed "Tender for the Improvement of Hainault Road," not later than 4 p.m. on the 23rd AUGUST, 1960. The Corporation does not bind itself to accept the lowest or any Tender.

J. H. PARKER,
Clerk of the Council.

Council Offices,
Brackley Lodge,
Brackley, Northants.
July, 1960.

MIDHURST RURAL DISTRICT
COUNCIL.PUMPING STATION AND MAINS
EASEBOURNE AND HENLEY WATERWORKS.

TENDERS are invited on a Fixed-price Basis for the CONSTRUCTION of a PUMPING STATION, and the INSTALLATION of PUMPS, and the CONSTRUCTION of SHORT LENGTHS of CAST-IRON LINK MAIN, together with ancillary works, at Easebourne and Henley.

Plans, General Conditions, Specification and Form of Tender may be obtained from the Engineer and Surveyor, Council Offices, Midhurst, on payment of £1 1s. deposit, which will be refunded on receipt of a bona-fide Tender.

Tenders must be enclosed in a plain sealed envelope endorsed "Pumping Station—Easebourne," and be delivered to the undersigned by Noon on MONDAY, 5th September, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

D. L. BLAY,
Clerk of the Council.

Council Offices,
Midhurst.

CONTRACTS

THE REPUBLIC OF THE SUDAN.
MINISTRY OF IRRIGATION AND HYDRO-ELECTRIC
POWER.

KHASM EL GIRBA DAM AND ASSOCIATED WORKS.

The MINISTRY OF IRRIGATION and HYDRO-ELECTRIC POWER of the Republic of the Sudan propose to call for TENDERS for the MAIN CIVIL ENGINEERING and ASSOCIATED WORKS of the KHASM EL GIRBA DAM SCHEME in the gorge of KHASM EL GIRBA on the ATBARA. The site is about 200 kilometres upstream from the town of Khartoum and is approximately 450 kilometres from the main Nile.

The Main Civil Engineering Works will comprise the Construction of a Buttress Concrete Dam across the River Channel with Earth Dams on either flank, together with Control Gates and other Equipment. The concrete dam will be 1,600 ft. long, 100 ft. wide, and a maximum height of 55 metres above river bed level. The length of the earth embankments will be approx. 3.5 kilometres.

The Associated Works will comprise the Construction of Permanent and Temporary Housing with Roads and Services, and MAIN CIVIL AND ASSOCIATED ENGINEERING WORKS:

(1) A preliminary pamphlet showing Drawings and description of the work involved will be available for issue now.

The general technical information in connection with the proposed works is indicated in the pamphlet.

(2) Contractors who may be interested in tendering for the Main Dam and Associated Works should submit full details of their qualifications and experience as soon as possible and not later than JULY 31st, 1960, to enable tender documents and Drawings to be issued on AUGUST 10th, 1960, to those contractors who satisfy the requirements of the Ministry.

ALTHOUGH THE GOVERNMENT OF THE REPUBLIC OF THE SUDAN IS NOT YET ABLE TO ENTER INTO ANY DEFINITE COMMITMENT, IT IS HOPEFUL THAT THE MAIN CIVIL ENGINEERING WORKS WILL COMMENCE IN NOVEMBER, 1960.

The Consulting Engineers to the Ministry on this project are: S.O.G.R.E.A.H., Societe Grenobloise d'Etudes et d'Applications Hydrauliques, Boite Postale 145, Grenoble, France.

Applications for the preliminary pamphlet by bona-fide firms should be made to one of the following, with a copy to the Consulting Engineers:

THE MINISTRY OF IRRIGATION AND HYDRO-ELECTRIC POWER, The Republic of the Sudan, P.O. Box 878, Khartoum, The Sudan.

THE DIRECTOR, Ministry of Irrigation and Hydro-Electric Power, The Republic of the Sudan, Was Medani, The Sudan.

Applications received after the dates specified above might not be considered.

BOROUGH OF ILFORD.

IMPROVEMENT OF HAINEAUT ROAD.

The CORPORATION invites TENDERS for the EXCAVATION FOR and the CONSTRUCTION of approx. 15,000 sq. yds. of 6in. LEAN-MIX CONCRETE SUB-BASE and 8in. REINFORCED CONCRETE CARRIAGeway SLAB, the Provision of approx. 4,000 sq. yds. of Concrete Kerb, together with approx. 400 sq. yds. of FOOTWAY and approx. ancillary drainage works.

Conditions of Contract and Drawings may be inspected upon application to the Borough Engineer, Town Hall, Ilford, from whom the Special Conditions, Specification, Bills of Quantities and Form of Tender may be obtained on payment of a deposit of Two Guineas which is returnable on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, in plain sealed envelope bearing no name or mark indicating the tenderer, and endorsed "Tender for the Improvement of Hainault Road," must be delivered to the TOWN CLERK, Town Hall, Ilford, not later than 4 p.m. on the 23rd AUGUST, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

BOROUGH OF ILFORD.

MAYFIELD SECONDARY BOYS' SCHOOL—
EXTENSION TO METALWORK ROOM.

TENDERS are invited for the ERECTION of an EXTENSION to the existing METALWORK ROOM and the ERECTION of TWO PARTITIONS in the DINING BLOCK at Mayfield Secondary Boys' School, Goodmayes Lane, Ilford.

Applications, in writing, for the Form of Tender, Bills of Quantities and Drawings should be made to the Borough Engineer, Town Hall, Ilford, accompanied by a deposit of £2 2s. which will be returned on receipt of a bona-fide Tender (not subsequently withdrawn) and all documents issued.

Conditions of Contract may be inspected at the Borough Engineer's Office during normal working hours.

Tenders, sealed in the envelope provided, with mark or identification as to the sender, must be delivered to the TOWN CLERK, Town Hall, Ilford, not later than 4 p.m. on TUESDAY, 23rd August, 1960. Priced Bills of Quantities must be returned at the same time as the Tender in the special envelope provided.

The Corporation do not bind themselves to accept the lowest or any Tender.

BOROUGH OF EPSOM AND EWELL.

GREENHOUSE WORKS—EWELL COURT, E WELL, SURREY.

The CORPORATION invite TENDERS from experienced contractors for the REBUILDING of a 39ft. x 14ft. GREENHOUSE SUPERSTRUCTURE in CEDAR WOOD, and the EXTENSION of an EXISTING GREENHOUSE, together with the PROVISION of PROPAGATING HOUSE and STAGING, and ALTERATIONS to 4in. dia. SEAWALL DUCK.

The Conditions of Contract, Form of Tender, Specification, Bill of Quantities and Drawing may be obtained from the Office of MR. COLIN COBBETT, A.M.I.C.E., M.I.M.E., Borough Engineer and Surveyor, Town Hall, Epsom, during normal office hours, upon payment of a deposit of £2 2s., which will be returned on receipt of a bona-fide Tender is submitted and not subsequently withdrawn.

Tenders must be delivered to me at the address below not later than 12 Noon, MONDAY, 15th August, 1960, and no Tender will be received or considered unless it is enclosed in a plain sealed envelope endorsed "Greenhouse—Ewell Court." This envelope must not bear any name or mark indicating the sender.

EDWARD MOORE,
Town Clerk.

Town Hall,
The Parade,
Epsom,
July, 1960.

CONTRACTS

COUNTY COUNCIL OF MIDDLESEX
HOT ROLLED ASPHALT WITH PITCH BITUMEN BINDER.

TENDERS are invited for LAYING by Barber-Greene or other approved machine approx. 1,000 tons HOT ROLLED ASPHALT WEARING COURSE having a PITCH BITUMEN BINDER on the CARRIAGEWAY of CHURCH ROAD, NORTHLITT, between Western Avenue and Rutland Road.

Documents can be obtained from the County Engineer, Middlesex House, 20 Vauxhall Bridge Road, Westminster, S.W.1.

Tenders are to be returned to the undersigned, in the envelope neatenveloped, by not later than WEDNESDAY, 10th August 1960.

The County Council does not bind itself to accept the lowest or any Tender.

KENNETH GOODACRE,
Clerk of the County Council.

EAST RIDING OF YORKSHIRE COUNTY COUNCIL.

TENDERS are invited for the SUPPLY and DELIVERY of 1,416 lin. ft. of 45in. and 48in. internal dia. REINFORCED CONCRETE CYLINDRICAL PIPES delivered carriage paid to WOODHALL WAY, MOLESFROTH, near Beverley.

Application for Form of Tender should be made to the County Surveyor, County Hall, Beverley.

Tenders, in a plain sealed envelope to be provided by the Council, endorsed "Tender for Reinforced Concrete Cylindrical Pipes," and bearing no name or mark indicating the sender, are to be delivered to the undersigned not later than 4 p.m. on WEDNESDAY, 10th August 1960.

THOMAS STEPHENSON,
Clerk of the Council.

County Hall,
Beverley.
22nd July, 1960.

COUNTY BOROUGH OF CROYDON.
NEW SWIMMING BATH.

Contractors who wish to TENDER for the ERECTION of a new SWIMMING BATH on the COMMUNITY CENTRE SITE, 10, 12, 14, 16, 18, 20 ADDINGTON, should apply to the Borough Engineer for Bills of Quantities. Closing date for Tenders, 2nd SEPTEMBER, 1960.

E. TABERNER,
Town Clerk.

COUNTY BOROUGH OF SUNDERLAND.
CONTRACTS FOR MATERIALS.

TENDERS are invited for the SUPPLY of the FOLLOWING for six months commencing 1st day of October next:

(1) Steel Wire Reinforcement for Concrete.
(2) Decorating Materials (Paint, etc.).
(3) Earthenware Pipes, Junctions, etc.
(4) Rainwater and Soil Goods.

(5) Timbers.
(6) Kerbs and Flags.
(7) Portland Cement.

(18) Bitumen Macadam, Broken Stone, Sand, etc.
(19) Gullies, Manhole Covers, Firegrates, etc.

Samples may be seen at Eden Vale Depot, Sunderland.

Specifications and Forms of Tender from the Public Works Manager, Ivor House, 1-3 Otto Terrace, Sunderland.

No Tender will be considered unless enclosed in a plain sealed envelope "Tender," followed by the subject to which it relates, addressed to me, Town Hall, Sunderland, and delivered at my Office by 10 a.m. on SATURDAY, 13th August, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

G. S. McINTIRE,
Town Clerk.

BOROUGH OF SCARBOROUGH.
SHEDS FOR CORPORATION HOUSES.

TENDERS are invited for the SUPPLY of SEC-TIONAL SHEDS for Council houses. It is anticipated a minimum of 200 sheds will be required. The sheds to be 8ft. x 6ft. x 6ft. to eaves. Specification and Form of Tender available from the undersigned. Delivery of the sheds will be as required, approx. three dozen at a time.

V. FORSHAW,
Borough Engineer and Surveyor.

Town Hall,
Scarborough.

CITY OF MANCHESTER.
TENDERS invited for the SUPPLY and DELIVERY of MACHINES and TOOLS to (a) CHARLTON PARK SECONDARY SCHOOL; (b) CLOUGH TOP SECONDARY SCHOOL.

Specification from CITY ARCHITECT, P.O. Box 488, Town Hall. Tenders returnable by AUGUST 10th.

CITY OF MANCHESTER.

The CENTRAL PURCHASING COMMITTEE invite TENDERS for (a) FORKS, SHOVELS and SPADES; and (b) a BLACK FLUID DISINFECTANT (B.S.S. No. 2462:1954—Group BA) required by the various departments of the Corporation during the 12 months ending 30th September, 1961.

Official forms, obtainable from the DIRECTOR OF PUBLIC CLEANING, Town Hall, Manchester, 2, to be addressed to the Central Purchasing Committee and returned in the official envelope provided (none other will be entertained) not later than MONDAY, 15th August, 1960.

HAYES AND HARLINGTON URBAN DISTRICT COUNCIL.

FILLING-IN UNDERGROUND SHELTER.

TENDERS are invited for the ABOVE WORKS, comprising BREAKING IN THE ROOF of the REINFORCED CONCRETE UNDERGROUND SHELTER, FILLING-IN of TRENCH, and REINSTATEMENT.

Documents from Engineer and Surveyor, Town Hall, Hayes, Middx., on payment of £1 1s. deposit to Treasurer of the Council, P.O. Box 6, Hayes, Middx. Deposit returnable on receipt of bona-fide Tender not withdrawn.

Tenders, in plain sealed envelopes endorsed "Tender for Contract No. 589—Filling-in Under-ground Shelter," but not indicating the sender, to be received by Clerk and Solicitor of the Council at undesignated address by 12 Noon, 15th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

Canvassing disqualifies.

GEORGE HOOPER,
Clerk and Solicitor of the Council.

Town Hall,
Hayes, Middx.

CONTRACTS

WORSLEY URBAN DISTRICT COUNCIL.

HIGHWAYS ACT, 1959.

MAKING-UP OF:
ABBOTS FORD ROAD.
BROUGHAM STREET.
NORTH GROVE.
SOUTH GROVE.
WEST GROVE.
SHALBOURNE ROAD.
KINGSLEY ROAD (PART).
HYDE ROAD (PART).

TENDERS are invited for the MAKING-UP of the ABOVE PRIVATE STREETS.

Tender documents can be obtained from, and Plan of Works inspected at, the Office of the Engineer and Surveyor, Town Hall, Walkden, on payment of a deposit of £2 2s. (if by cheque, payable to Worsley Urban District Council), which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn.

Completed tender documents are to be returned to the undersigned, in plain sealed envelopes, endorsed "Tender for Private Street Works," not later than 13th AUGUST, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

ROBERT E. HUBAND,
Clerk of the Council.

Town Hall,
Walkden.
Manchester.

WORTLEY RURAL DISTRICT COUNCIL.

PROTECTIVE CLOTHING.

TENDERS are invited for the SUPPLY and DELIVERY of 48 OVERCOATS.

Additional particulars may be obtained from the Chief Public Health Inspector, Council Offices, Grenoside, near Sheffield.

Sealed Tenders, endorsed "Protective Clothing," are to be delivered to the undersigned not later than 12 Noon on SATURDAY, 13th August, 1960.

ADRIAN M. KELLY,
Clerk of the Council.

Council Offices,
Grenoside.
Near Sheffield.

NONSUUCH PARK JOINT MANAGEMENT COMMITTEE.

PROVISION AND ERECTION OF DUTCH BARN AND GREENHOUSE.

The Committee invite TENDERS from experienced contractors for the FOLLOWING:-

(a) Provision and Erection of a Dutch Barn.
(b) Provision and Erection of an Aluminium Greenhouse, approx. 50ft. x 20ft. for the use of the Committee members. The superstructure is to be supported on a 2ft. 6in. dwarf wall. Roof lights are to be continuous on both sides, with sliding doors at each end.

The Conditions of Contract, Form of Tender, Specification of Quantities and Drawing may be obtained from the Office of A. C. COBBETT, A.M.I.C.E., M.I.M.E., Surveyor to the Committee, Town Hall, Epsom, during normal office hours, upon payment of a deposit of £2 2s., which will be returned if a bona-fide Tender is submitted and not subsequently withdrawn.

Tenders must be delivered to me at the address below not later than 12 Noon on MONDAY, 15th August, 1960, and no Tender will be received or considered unless it is enclosed in a plain sealed envelope addressed "Dutch Barn and Greenhouse—NonSuch Park." This envelope must not bear any name or mark indicating the sender.

The Committee do not bind themselves to accept the lowest or any Tender.

EDWARD MOORE,
Clerk of the Committee.

Town Hall,
The Parade,
Epsom, Surrey.
July, 1960.

MASON'S WORK on OFFER from August 1st in all London areas. Footway Laying and Granite Kerb Fixing.—Apply: FITZPATRICK AND SON (CONTRACTORS), LTD., 455 Old Ford Road, Bow, London, E.3.

For Contracts received too late for classification see page 425

APPOINTMENTS VACANT
WEST AFRICAN BUILDING RESEARCH INSTITUTE.

The Institute is expanding its activities and invites APPLICATIONS for the FOLLOWING POSTS:

PRINCIPAL SCIENTIFIC OFFICERS.

Functional Efficiency Division (physical studies relating to the design of buildings for tropical climates).

Candidates aged at least 31, must have a good honours degree in physics, applied mathematics or electronics, with considerable post-graduate experience.

Appointment on contract gratuity terms within salary scale £2,460 to £2,820 p.a. SCIENTIFIC OFFICERS OR SENIOR SCIENTIFIC OFFICERS.

(a) Materials Division (investigations into the properties and durability of building and civil engineering materials in the tropics). Degree in science, preferably chemistry, civil engineering or soil science, with at least two years' post-graduate experience, essential.

(b) Structural Division (research on the strength properties of tropical soils and the design of foundations).

Civil, mechanical or structural engineering qualifications required. A graduate must have at least two years' post-graduate experience.

Appointment on contract gratuity terms within salary scale £1,392 to £2,388 p.a. GENERAL CONDITIONS (ALL POSTS).

Gratuity at rate of £150 p.a. salary fully completed on completion of contract. Free passage for officer, wife and up to three children under 18 years. Overseas Education Allowance of £100 p.a. each for up to three children under 18 years. Accommodation at low rental interest-free advance for car and car maintenance allowances. General home leave on full pay, income tax at local rates.

Apply to DIRECTOR OF RECRUITMENT, Colonial Office, London, S.W.1. Give full name, age, qualifications and brief details of experience. Quote BCD197/487/01/D14 (P.S.O.) or BCD197/487/04/D14 (S.O./S.S.O.).

APPOINTMENTS VACANT

CENTRAL ELECTRICITY GENERATING BOARD.

NORTHERN PROJECT GROUP.

APPLICATIONS are invited from suitably qualified persons for the TEMPORARY APPOINTMENTS of INSPECTORS (CIVIL) for the duration of the site works at Thorpe Marsh Power Station Project, near Doncaster.

Salary within range £850-£1,130 p.a. N.I.C. Conditions of Service. The successful candidates will be responsible to the Board's Resident Engineer for the inspection of civil works undertaken by contractors. Experience in piling, foundations, shoring, reinforcement and concrete mixing and placing is therefore essential.

Application Forms available from ADMINISTRATIVE OFFICER, Central Electricity Generating Board, Northern Project Group, Agecroft Road, Swinton, Pendlebury, Manchester, to be returned by 1st AUGUST, 1960, quoting Ref. N.53/1.

Envelopes should be marked "Confidential—Star Vacancy."

MERIONETH COUNTY COUNCIL.
HIGHWAYS AND BRIDGES DEPARTMENT.

APPLICATIONS are invited for the FOLLOWING PERMANENT APPOINTMENTS in the County Surveyor's Department:

(1) Assistant Engineer—Salary Grade A.P.T. IV of N.I.C. Scales.

(2) Assistant Engineer—Salary Grade A.P.T. II of N.I.C. Scales.

Applications for appointment (1) should have had good experience in the design and preparation of road and bridge schemes, and be capable of supervising the actual works whether executed by contractor or Direct Labour.

Preference will be given to candidates who are Associate Members of the Institution of Civil Engineers and/or the Institution of Municipal Engineers.

Applicants for appointment (2) should have had experience in the design and preparation of road and bridge schemes.

Preference will be given to candidates who are suitably qualified and have had previous experience under a County Authority.

Applications on the Council's application forms, must be received by the COUNTY CLERK, County Offices, Dolgellau, not later than MONDAY, 8th August, 1960.

BOROUGH OF GLOSSOP.
CONSTRUCTION OF NEW SEWERAGE WORKS.

RESIDENT ENGINEER.

The Council invite APPLICATIONS for the POST of RESIDENT ENGINEER on the construction of about 900 lin. yds. of reinforced concrete pipe sewers varying in dia. from 30in. to 10in. about 100 lin. yds. of asbestos-cement pipe sewers 15in. dia. in Glossop Brook; about 1,050 lin. yds. of spun-iron rising main 14in. dia., with manholes and hatch-bay chambers; and two sewage pumping stations; sludge tanks and chambers; the existing disposal works comprising demolition of existing tanks, conversion of existing sedimentation tanks to storm-water tanks, construction of a sludge pumping station, pipework, chambers, roads, paths, etc.; the construction of a reinforced concrete bridge over the River Etherow; and the construction of a new sewage disposal works comprising detention chambers, sedimentation tanks, main pumping station, proportioning chambers and bacteria beds, humus tanks, sludge pumping station, sludge digestors, sludge drying beds, laboratory and office, pipework, chambers, roads, paths, and incidental works.

The period of this contract is two years, and the salary will be £1,220-£1,375 p.a., the starting salary to be in accordance with qualifications and experience.

The successful applicant will work under the general direction of the Council's Consulting Engineers, MESSRS. A. H. S. WATERS AND PARTNERS, and must have had considerable experience on works of the nature described.

Applications, endorsed "Resident Engineer," stating age, experience and qualifications, accompanied by the names of two persons to whom reference may be made, must be forwarded to the undersigned not later than 10th AUGUST, 1960.

I. ARTHUR PUGH,
Town Clerk.

Municipal Buildings,
Glossop, Derbyshire.

BOROUGH OF CHORLEY.

APPOINTMENT OF SENIOR ENGINEERING ASSISTANT.

APPLICATIONS are invited for the ABOVE-MENTIONED APPOINTMENT in the Borough Engineering Department at a salary within A.P.T. Grade III (£880-£1,065).

Candidates should hold appropriate qualifications. The National Scheme of Conditions of Service and the Superannuation Acts apply.

The Council will consider provision of housing accommodation for the successful applicant if required.

Applications, stating age, qualifications and experience, with copies of two recent testimonials, must be received by the undersigned not later than the 6th AUGUST, 1960.

ROBERT POTTER,
Town Clerk.

Town Hall,
Chorley.

15th July, 1960.

HAYES AND HARLINGTON URBAN DISTRICT COUNCIL.

BUILDER'S CLERK REQUIRED by Hayes and Harlington U.D.C. Salary within Clerical Division Grade II, i.e., £670-£765 per annum plus London Weighting: up to 20 years, £15 per annum; 21-25 years, £25 per annum; 26 years and over, £40 per annum.

Candidates should possess a good knowledge of building construction and maintenance work, and have considerable experience in a similar capacity with a local authority or a building contractor. Experience in measuring-up for and the operation of incineration plant schemes an advantage.

The working hours are those prevailing in the building industry, i.e., at present 44 hours per week.

The Council is unable to assist with the provision of housing accommodation.

Form of Application and further particulars and conditions of service obtainable from the undersigned, which when completed must be returned by 8th AUGUST, 1960.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall,
Hayes, Middx.

APPOINTMENTS VACANT

CITY OF OXFORD.
RESIDENT ENGINEERING STAFF REQUIRED FOR
BLACKBIRD LEYS LINK ROAD AND
COWLEY CENTRE DEVELOPMENT.

APPLICATIONS are invited for the FOLLOWING TEMPORARY POSTS to commence early September, 1960, for a period of from two to three years:

Resident Engineer—Remuneration £1,300 to £1,600 per annum, depending on qualifications and experience. The person appointed to this post will have to supervise the contracts for the Blackbird Leys Link Road and Cowley Centre Development. Applicants should have considerable experience of reinforced concrete bridge construction, roadworks, drainage works, administration of contracts, etc., and should possess a University Degree and/or Corporate Membership of the Institution of Civil Engineers.

Assistant Resident Engineer—Remuneration £1,100 to £1,350 per annum, depending on qualifications and experience. Applicants should have considerable experience of reinforced concrete bridge construction, roadworks, drainage works, administration of contracts, etc. The person appointed to this post will principally assist the Resident Engineer in the Blackbird Leys Link Road. Should possess a University Degree or have passed Parts 1 and 2 of the Institution of Civil Engineers' examination, or equivalent.

Applications, stating details of training, experience, current and previous employment, and giving the names of three referees, should be made in writing to the City Engineer, Town Hall, Oxford, not later than MONDAY, 15th August, 1960. Housing accommodation will be provided if required.

HARRY PLOWMAN.
Town Clerk.CITY OF MANCHESTER.
HOUSING DEPARTMENT.

APPLICATIONS are invited from suitably qualified persons for the FOLLOWING APPOINTMENTS:

CLERKS OF WORKS (temporary), A.P.T. II, £765-£880 per annum.

Particulars of age, qualifications and experience of the building trade, including supervision, if any, of reinforced concrete structures, as required in multi-storey flats, to the DIRECTOR OF HOUSING, Town Hall, Manchester, 2, to be received by 6th AUGUST, 1960.

NEWTON ABBOT URBAN DISTRICT COUNCIL.

APPOINTMENT OF WORKS SUPERINTENDENT.

APPLICATIONS are invited for the ABOVE APPOINTMENT in the Engineer and Surveyor's Department at a salary in the A.P.T. Grade I, commencing at £610-£765 per annum.

Candidates must have had experience with a local authority, including the following: Street clearing, sewerage and sewage disposal works, highway maintenance and construction, housing, repairs, street lighting, etc.

Housing accommodation will be available if necessary.

Candidates will be required to drive a van which is provided to carry out the necessary duties. The appointment will be subject to the provisions of the Local Government Superannuation Act, and the successful candidate will be required to pass a medical examination.

Applications, stating age and other particulars, qualifications (if any), experience, and previous appointments, should be forwarded to the Engineer and Surveyor, 1st Floor, Town Hall, Newton Abbot, accompanied by not more than three recent testimonials, not later than 12th AUGUST, 1960.

H. EVANS.
Clerk of the Council.TOWN HALL,
Courtenay Street,
Newton Abbot,
15th July, 1960.

RURAL DISTRICT COUNCIL OF WINDSOR.

EARLYDENE ESTATE—SEWERAGE.

APPLICATIONS are invited for the POST of CLERK OF WORKS for the above Scheme, involving the laying of 6in. dia. stoneware and spun-iron sewers, a 4in. dia. pumping main, and the construction of a reinforced concrete underground pumping station.

Applicants should have had previous experience of similar works, and be competent to set-out, level and maintain records of work done. The appointment will be temporary, for a period of about nine months, and will be under the supervision of the Council's Consulting Engineers, MESSRS. LEMON AND BLIZARD, 59 Tufton Street, Westminster, S.W.1.

The salary will be £1,000 per annum inclusive, and the appointment will be subject to one month's notice on either side.

Applications, stating age, qualifications, and particulars of experience, with copies of two recent testimonials, should be delivered to the undersigned not later than FRIDAY, 12th August, 1960.

GEO. W. ALLEN.
Clerk of the Council.COUNCIL OFFICES,
Kingswick,
Sunninghill,
Ascot, Berks.

STEVENAGE DEVELOPMENT CORPORATION.

VACANCIES are available in the Chief Engineer's Department for keen ENGINEERS, with suitable qualifications, seeking interesting and varied experience. The work includes design, construction and supervision of major and estate roads, extensive cycleway and underpass system, lighting, pedestrian shopping centres, car parks, services, sewerage and drainage.

(a) Two Engineers — A.P.T. IV/V (£1,065-£1,375 p.a.).
(b) Two Engineering Assistants—A.P.T. II/III (£765-£1,065 p.a.).

These appointments are likely to last for five years or more, and provide a sound background for further professional advancement.

Housing accommodation in due course in appropriate cases. Local Government superannuation.

Applications, stating qualifications and experience, together with the names and addresses of two referees, to CHIEF ADMINISTRATIVE OFFICER, Ascot House, near Stevenage, Herts., by 15th AUGUST, 1960.

APPOINTMENTS VACANT

GOVERNMENT OF KENYA.
MINISTRY OF WORKS.

ENGINEERS (ROADS).

Qualifications: Candidates (not over 45) should have either a University degree, or equivalent recognised by the Institution of Civil Engineers, and two years' practical experience; or have passed, or be otherwise exempt from, Parts I and II of the Final Examinations of the Institution of Civil Engineers, and have had not less than five years' practical experience.

Experience should include one or more of the following: (a) Location and preparation of plans and contract documents for the construction of trunk roads; (b) design of roads for rural and urban areas; (c) construction of roads and bridges with modern equipment, either by contract or direct labour. Some knowledge of soil mechanics and the results of experiments on soil stabilisation would be an advantage.

Duties will include all aspects of road engineering, including planning and supervision both in the office and in the field.

Terms: One contract for one tour of 24-45 months in the first instance, with salary in scale £1,194 to £1,863 p.a. and gratuity on the satisfactory completion of engagement.

Free passages. Generous home leave. Free medical attention. Travel allowances at local rates.

Apply DIRECTOR OF RECRUITMENT, Colonial Office, London, S.W.1. Give full name and age, and brief details of qualifications and experience. Quote BCD112/7/09/D14.

GOVERNMENT OF SOUTHERN CAMEROONS.

EXECUTIVE ENGINEER.

Qualifications: Candidates (not over 45) should have either a University degree, or equivalent, recognised by the Institution of Civil Engineers, and two years' practical experience; or have passed, or be otherwise exempt from, Parts I and II of the Final Examinations of the Institution of Civil Engineers, and have had not less than five years' practical experience. Applications will also be considered from Corporate Members of the Institutions of Municipal or Structural Engineers or of the Royal Institution of Chartered Surveyors, who should have considerable experience in civil engineering construction.

Duties: To carry out preliminary surveys and investigations for all types of civil engineering undertakings. To carry out engineering designs in steel, reinforced concrete, etc., and to carry out tests on soils, concrete, etc., and to supervise road and building maintenance and construction in conjunction with running an Area Engineer's office.

Terms of Appointment: Contract/gratuity for one tour of nine to 12 months only.

Emoluments in Scale £1,720 to £2,635 p.a. plus gratuity, free passages. Generous home leave.

Apply DIRECTOR OF RECRUITMENT, Colonial Office, London, S.W.1. Give full name, age, and brief details of qualifications and experience, quoting BCD112/603/02/D14.

STATES OF JERSEY.

SEWERAGE BOARD.

APPLICATIONS are invited for the APPOINTMENT in the Consultant Engineer's Office of an ASSISTANT CIVIL ENGINEER for the design of sewers and pumping stations.

Appointments are temporary, terminable by one month's notice on either side, but anticipated duration is at least two years.

The States of Jersey does not undertake to provide housing accommodation.

Applications, giving full details of training, qualifications, present and previous appointments, stating age and whether married or single, and enclosing copies of testimonials, should be delivered to the undersigned as soon as possible.

S. AVERILL GOTTHARD, B.Sc., M.I.C.E.,
Hon. M.Inst.S.P., Consultant Engineer.

PUBLIC HEALTH OFFICES,
South Hill,
St. Helier, Jersey.

NORFOLK COUNTY COUNCIL.

HIGHWAYS DEPARTMENT.

APPLICATIONS are invited for the UNDERMENTIONED APPOINTMENTS.

(1) First Assistant Divisional Surveyor in Division No. 1 (Headquarters at Downham Market).—Salary Scale Special (£785-£1,070 per annum). Starting point on scale according to qualifications and experience. Preference will be given to candidates holding Associate Membership of the Institutions of Civil Engineers, Municipal Engineers or Highway Engineers. Experience in a Divisional Surveyor's Office of a County Council is essential, and experience in other departments of highway engineering work, in addition, would be an advantage.

(2) Two Assistant Surveyors in the Surveyor's Office, Norwich—Grade III/IV (£580-£1,220 per annum). Starting point on scale according to qualifications and experience.

Applicants should be Associate Members of the Institution of Civil Engineers, or hold some other qualification by examination. They must be competent Surveyors, having had experience of design, setting-out and construction of roads.

(3) One Engineering Assistant at Head Office, Norwich, for the Planning Control Section of the Highways Department—Grade I/II (£610-£880 per annum). Starting point on scale according to qualifications and experience.

Preference will be given to applicants who are qualified, or in process of qualifying.

For each of the above posts a motor car is essential, and the appointed officer will be entitled to an annual user's car allowance in accordance with the recommendations of the National Joint Council, as adopted and applied from time to time by the County Council. Loans available for purchase if required.

The appointments will be on the permanent establishment basis, and terminated by one month's notice on either side. The provisions of the Local Government Superannuation Acts, 1937 to 1953, apply. The successful candidates will be required to pass a medical examination. Grant towards removal expenses.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

The National Joint Council Service Conditions apply in general.

Further particulars and Application Forms obtainable from the COUNTY SURVEYOR, County Offices, Norfolk County Council, Thorpe Road, Norwich, Norfolk, NOR 47A.

Latest date for completed Application Forms—26th AUGUST, 1960.

APPOINTMENTS VACANT

BOROUGH OF HIGH WYCOMBE.

APPOINTMENT OF CLERKS OF WORKS.

APPLICATIONS are invited for the APPOINTMENT OF TWO CLERKS OF WORKS at a salary of £900 per annum.

Candidates should be experienced in the supervision of private estate development and should have a thorough knowledge of road and sewerage works.

Candidates should submit full details as to age, qualifications and experience together with names of two persons to whom references may be made.

Applications should be forwarded to the undersigned by not later than MONDAY, 15th August, 1960.

J. A. PARKINSON, M.A., A.M.I.C.E.,
Borough Engineer and Surveyor.
Municipal Offices,
High Wycombe.

CITY OF OXFORD.

Vacancy for TECHNICAL ASSISTANT CHEMIST at the Sewage Purification Works, Sandford-on-Thames, to assist in the control of trade effluent discharges and the operation of a modern treatment works. Salary Grade, A.P.T. III (£880-£1,065 per annum). Housing accommodation provided, required.

Candidates should be qualified members of the Institution of Sewage Purification Engineers with activated sludge, sludge digestion, vacuum filtration and/or trade effluent inspection an advantage.

Appointment superannuable and subject to National Conditions of Service. Medical examination.

Forms of application may be obtained from, and should be returned to, the City Engineer, Town Hall, Oxford.

Closing date for receipt of applications, MONDAY, 8th August, 1960.

HARRY PLOWMAN,
Town Clerk.

HORNCHURCH URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the APPOINTMENT of temporary TECHNICAL ASSISTANT, Architectural Section, Grade A.P.T. II (£765-£880 p.a.) plus a pluse equivalent to the current London Weighting.

Applicants must be competent Building Surveyors with experience of maintenance work to houses and all types of public buildings, including inspections, preparation of specifications, estimates and supervising work to be carried out by tenders.

Preference will be given to applicants who have passed the Intermediate Examination of the R.I.C.S., hold the R.I.B.A. Building Surveyor's Diploma, or have the appropriate Higher National, City and Guild, or Institute of Builders Certificate in Building.

Forms of application, returnable by SATURDAY, the 13th August, 1960, may be obtained from the undersigned.

P. L. COX,
Clerk of the Council.

CAMEROONS DEVELOPMENT CORPORATION.

BUILDING FOREMAN REQUIRED for service in the British Army in the Territories of the Southern Cameroons, West Africa.

Candidates should have served a full apprenticeship with a reputable firm and should be well experienced in, and have supervised, general building and engineering works.

Dependent upon qualifications and experience, the compensation salary will be in the range £975-£1,325 (including Inducement Allowance) plus participation in a bonus scheme.

Free return passages are provided, together with free furnished accommodation during residence in the territories. A reasonable amount of free lighting and fuel is also provided.

An outfit allowance of £80 is payable on first appointment; children's allowances are payable up to a maximum of two at the rate of £75 each per annum. Employees are required to contribute 10 per cent. of their salary to a provident fund, the Corporation contributing a further 15 per cent. Tours of 18 to 24 months, with liberal leave on full pay after completion of a tour.

Applications, giving full particulars, in writing to RUBBER AND MINING AGENCIES, LTD., 52 Leadenhall Street, London, E.C.3.

SENIOR and JUNIOR SITE ENGINEERS and QUANTITY SURVEYORS REQUIRED for civil engineering and building contracts in England and Wales. These posts are permanent appointments with good prospects and superannuation schemes in operation.—Applications, which will be dealt with in strict confidence, must give details of age, experience, qualifications and salary required, and should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING, LTD., Ettingshall, Wolverhampton.

D.C.M. CONTRACTORS (LIVERPOOL), LTD. QUANTITY SURVEYOR and CIVIL ENGINEERS REQUIRED for bridge and road works contracts in Lancashire and North Cheshire. Permanent positions with entry into non-contributory pension scheme after trial period.—Write, stating age, previous experience and salary required, to Managing Director, D.C.M. Contractors (Liverpool), Ltd., Bluebell Lane, Huyton-with-Roby, Lancs.

SENIOR LAYOUT AND SURVEYING ASSISTANT REQUIRED for estate development, which includes shop and flat schemes throughout the country. Applicants should be a competent draughtsman with considerable experience in design of layouts. Interesting work with good prospects. Salary up to £1,000 p.a. Car allowance or use of office car. Holidays honoured.—Address replies to the Manager, Planning, Survey and Architectural Dept., DAVIS ESTATES, LTD., 346-50 Kilburn High Road, London, N.W.6.

CIVIL ENGINEERS REQUIRED for programming and planning civil engineering projects, including the design of incidentally temporary works in any part of the British Isles. Permanent positions with excellent prospects are available. Pension scheme and life assurance.—Apply in writing, stating education, age, qualifications, experience, and salary required, to ROBERT M. DOUGLAS (CONTRACTORS), LTD., 395 George Road, Birmingham, 23.

SITE MEASURING AND COSTING SURVEYORS REQUIRED for contract near Stevenage. Local men preferred, although there will be opportunities to travel later. Age between 21 and 30. Must have had previous site experience and knowledge of standard methods of measurement.—Apply, with brief details, to Contract Labour Department, SIMON-CARVES, LTD., Cheadle Heath, Stockport, Cheshire, quoting Ref. SC.77.

APPOINTMENTS VACANT

SENIOR QUANTITY SURVEYOR REQUIRED for employment with Cumberland builders. Experience of firm accounts and estimates. House available. Write, giving full details of experience and qualifications, and state salary required, to Box V.1715, "The Contract Journal."

ROLLED ASPHALT FOREMAN REQUIRED for London work only. Permanent staff job with top wages and conditions for first-class man. MOWLEM PAVING CO., LTD., 263 Tunnel Avenue, Greenwich, S.E.10. Telephone: GREenwich 2122.

PLANT MAINTENANCE FITTER REQUIRED for Greenwich depot. Staff job with good wages and conditions offered to first-class man. Some experience with small diesel engines desirable.—MOWLEM PAVING CO., LTD., 263 Tunnel Avenue, S.E.10. Tel.: GREenwich 2122.

SURVEYOR

REQUIRED by old-established and expanding Cambridge building firm for site measurement, interim certificates and preparation of final accounts up to £1m. Excellent salary for man with right experience and qualifications.—Full details, in confidence, to: BOX V.2298, "THE CONTRACT JOURNAL."

SENIOR ENGINEER/AGENT REQUIRED for permanent position on contracts up to £1m. in London area. Applicants will be eligible for Area Agent position and superannuation scheme after satisfactory service.—Write Box V.2336, "The Contract Journal."

SENIOR DRAUGHTSMEN REQUIRED for well-paid permanent appointments. Superannuation scheme can be negotiated. Applications, giving full past experience, present salary and copy references, to be submitted to the Manager, the Concrete Department, THE CROFT GRANITE, BRICK AND CONCRETE CO., LTD., Croft, near Leicester.

SENIOR COST AND BONUS SURVEYOR REQUIRED by prominent London contractor to take charge of a section covering several important contracts. Must be well experienced in the assessment of targets and site negotiations, and also the preparation of unit cost estimates. Good progressive and motivating position for the right applicant.—Write in confidence, giving full details of experience in chronological order, and salary required, to Box No. SC.3585, A.K. Advertising, 212a Shaftesbury Avenue, London, W.C.2.

PRODUCTION MANAGER

A rapidly expanding group of companies REQUIRE a PRODUCTION MANAGER for their Midland factory, for experienced management of hydraulically pressurised steel kerbs. This is a top-grade appointment calling for a man with energy, drive and initiative. Superannuation scheme in force.

WRITE BOX V.2296, "THE CONTRACT JOURNAL."

SENIOR and JUNIOR ENGINEERS REQUIRED for sites in Bedfordshire and Gloucestershire.—Apply Contracts Manager, SYDNEY GREEN AND SONS (CONTRACTORS) LTD., Highlands Farm, Henley-on-Thames, Oxon.

A FIRM of high reputation REQUIRES a GENERAL FOREMAN who is skilled in organising and controlling sportsground construction and engineering contracts. Must be able to drive.—Write Box V.2342, "The Contract Journal."

MOWLEM PAVING CO., LTD., REQUIRE additional SUPERVISORS for asphalt surfacing contracts. Duties will be to control and organise the work of road gangs operating in the London area. Experienced and practical men are invited to apply in writing with details of training, previous position, age, etc., to 19 Grosvenor Place, S.W.1. A good salary commensurate with experience is envisaged, and a car is provided, or allowance paid. A pension scheme operates after probationary period. All replies treated as confidential.

DRAWING OFFICE ASSISTANT REQUIRED for large estate developers, working on houses, shops and flats. Applicant should be a competent Draughtsman and interested in occasional field-survey. Starts up to £11 per week. Pension scheme. Holidays honoured.—Address replies to the Manager, Planning, Survey and Architectural Dept., DAVIS ESTATES, LTD., 346-50 Kilburn High Road, London, N.W.6.

WORKS MANAGER

The rapidly expanding BANBURY BUILDING GROUP REQUIRE a WORKS MANAGER for their Banbury factory. Only man with previous experience and a sound practical knowledge in precast concrete buildings need apply. First-class salary paid according to experience. Superannuation scheme available.—Apply, stating experience and salary required, to:

Works Director,
PORTABLE CONCRETE BUILDINGS, LTD.,
Adderbury, near Banbury, Oxon.

ACCOUNTS AND GENERAL CLERK (Male) REQUIRED in Wandsworth civil engineering contractors' offices. Must be quick and accurate at figures and an energetic person. Permanent position and pension scheme for right man.—Please write details of past experience, age and present salary, to Box V.2377, "The Contract Journal."

JUNIOR CIVIL ENGINEERS REQUIRED to work on sites with excellent opportunities for training. Applicants should be graduates, or equivalent, and should be under the ages of 22 and 26.—Apply in writing, giving brief details of qualifications and experience (including vacation course work) also stating age, to the Chief Engineer, THE DEMOLITION AND CONSTRUCTION CO., LTD., 3 St. James's Square, S.W.1.

ESTIMATOR, experience roads and sewers. REQUIRED by medium-sized South Coast contractors. Pension scheme. Car. Assistance with housing if needed.—Write fully to G. AND G. F. MAIDMENT (POOLE), LTD., Cranbrook Road, Parkstone, Poole, Dorset.

AGENT REQUIRED by major civil engineering and building contractors operating on a national scale on nuclear, steel and hydro-electric projects. This permanent appointment is initially for a civil engineering contract with excellent opportunities for advancement. Good salary and conditions, and entry into superannuation scheme after 12 months' service.—Write Box V.2369, "The Contract Journal."

APPOINTMENTS VACANT

CHIEF ESTIMATOR.—THE LONDON FERRO-CONCRETE CO., LTD., urgently REQUIRE a top-class Civil Estimator, aged about 30-35, for estimating in-situ and precast concrete structures. Applications shall be sent to the Managing Director, Maxted Close, Hemel Hempstead.

QUANTITY SURVEYOR REQUIRED for long civil engineering contract, Chester area.—Apply F.C. CONSTRUCTION CO., LTD., City Road, Derby.

BARBER-GREENE DRIVER REQUIRED for work in London area only. Permanent job to first-class man.—MOWLEM PAVING CO., LTD., 263 Tunnel Avenue, S.E.10. Tel.: GREenwich 2122.

LIVE SALESMAN REQUIRED for contractors' plant department. Permanent, progressive pensionable post. Housing available.—FRED WATKINS (ENGINEERS), LTD., Coleford, Glos.

YOUNG Graduate CIVIL ENGINEER REQUIRED by old-established firm dredging contractors. Previous experience not essential. Employment on permanent basis with full staff benefits to right man. Write Box V.2311, "The Contract Journal."

ENGINEER

REQUIRED for setting out and levelling on medium-size road, sewer and building contracts. This would suit young man wishing to gain experience for advancement to engineer/agent. Transport provided. Pension scheme in operation after qualifying period. Applications to:

Civil Engineering Manager,
H. C. JANES, LTD.,
183 High Town Road, Luton.

SITE ENGINEER (experienced) REQUIRED. Capable of setting-out for roads, sewers on housing sites, etc. Knowledge of traverse surveys desirable. Permanent and pensionable position to suitable applicant.—Apply in writing, giving full particulars of experience, qualifications, also age, and salary required, to Building Manager, M. J. GLEESON (CONTRACTORS), LTD., Haredon House, London Road, North Cheam, Surrey.

MATERIALS CLERK, able to read drawings and with site experience on civil engineering contracts. REQUIRED for estimating department in the London office of civil engineering contractors. Write Box V.2354, "The Contract Journal."

CIVIL ENGINEERING ESTIMATOR REQUIRED. Please apply, in writing, giving full details of previous experience, to: WILLMEN'S BROS., LTD., 462 London Road, Isleworth, Middlesex.

CIVIL ENGINEERS with experience of contracting at home and overseas and who require a settled home address are invited to apply for a vacancy as ESTIMATOR at head office of contractor near Buckingham Palace.—Write brief details of experience to Box C1677, L.P.E., Romano House, 399/401 Strand, London, W.C.2.

J. I. CASE CO., LTD.,

Will appoint additional AREA REPRESENTATIVES in the North-East, Midlands, South-East. If you are an absolutely first-class earthmoving representative and you wish to join a progressive and rapidly expanding company, we invite you to apply (every application in complete confidence) in the first instance to:

Sales Manager,
J. I. CASE CO., LTD.,
Mill Road, West Drayton, Middlesex.

AGENT REQUIRED to take charge of major bridge construction in West Africa. Applicants must be qualified civil engineers with considerable experience in bridge foundation and fabricated steel erection work. Previous overseas experience would also be considered important. Salary offered £200-£250 per month with free accommodation and three months' paid leave after 18 months' service. Applicants must give the fullest particulars of past experience, positions held and remuneration received.—Please reply to Box V.2355, "The Contract Journal."

CONTRACTS MANAGER REQUIRED for building and civil engineering company for their northern area extending from Lancashire to Scotland. The applicants to be based in Lancashire. Applicants will have a good all-round knowledge of building and civil engineering in all its forms, to be able to recruit and supervise site staff and work completely on their own initiative. Car provided, and pension scheme after initial trial period.—Write, in confidence, to Box V.2379, "The Contract Journal."

GENERAL FOREMAN REQUIRED for road and sewer reconstruction job in Birmingham. Good wages and permanent position for right man.—Tel. VIC 3661 for interview.

MANAGER

REQUIRED to take immediate control of a small scaffolding and plant hire business, S.W. London. Applicants must have proved and successful experience in sales, estimating, site supervision, costing and office organisation.—Write in first instance to:

BOX V.2356, "THE CONTRACT JOURNAL."

SMALL company REQUIRE CONTRACTS ENGINEER. Capable of supervising civil engineering works through all phases. Contracts to value of £1,000,000. Preference will be given to man who has been contractor-trained from the start and can produce first-class references. Must be prepared to settle in or near county town. Salary range £1,000-£1,500 p.m. New car and bonus based on company's profit. On-going projects interesting and varied and prepared to work hard for mutual advancement need apply.—Reply to the Secretary, WORCESTER PLANT HIRE AND CONTRACTORS, LTD., 6 Bank Street, Worcester.

SALES REPRESENTATIVE, experienced in building and contracting trades, REQUIRED to handle Massey-Ferguson Industrial tractors, diggers, shovels, etc.—Apply by letter, giving details of age, experience, etc., to the Manager, EASTERN TRACTORS, LTD., Chelmsford, Essex.

TWO SITE ENGINEERS REQUIRED IMMEDIATELY for sewage contracts. Opportunities for advancement. Site Agents to applicants of proved experience and ability. Salaries £750 to £1,000 per annum, according to experience.—Write, stating age, qualifications and experience, to A. BRETT (CONTRACTORS), LTD., Grimsargh, near Preston.

APPOINTMENTS VACANT

GENERAL FOREMAN (Civil Engineering) REQUIRED for reinforced concrete contracts covering bridges, sewage works, bunkers, etc., in various parts of the U.K. Previous experience as General Foreman essential. Attractive salary, permanent staff, pension scheme.—Applications, giving age, previous experience and present position, in confidence, to Contract Labour Department, SIMON-CARVES, LTD., Cheddle Heath, Stockport, Cheshire, quoting Ref. SC.79.

COMPETENT REPRESENTATIVE REQUIRED by London plant company. Must be experienced and should preferably have contacts in London and Home Counties.—DUDLEY VALE, LTD., 2, Buckingham Place, London, S.W.1. Victoria 0252.

AREA CONTRACTS MANAGER—An expanding civil engineering and building contractor requires an experienced manager, suitable qualifications to supervise contracts in the Midlands area. Experience in industrial building is important, but management ability, drive and ambition are the main requirements.—Applicants should submit full details of experience and qualifications to Manager, Director, INDUSTRIAL DEVELOPMENT AND CONSTRUCTION, LTD., Industrial House, Stratford-upon-Avon.

WALTER LLEWELLYN AND SONS, LTD.

Plant Department, REQUIRE a DEPOT MANAGER. Duties include the control of repair of mechanical and non-mechanical plant, despatching plant to sites, control of transport. Permanent and pensionable position with expanding organisation.—Apply:

WALTER LLEWELLYN AND SONS, LTD.,
16-20 South Street, Eastbourne.

ENGINEER REQUIRED to supervise contracts in the South. This is a senior appointment in an expanding company, with good conditions of employment. Applications should have experience of controlling building and civil engineering contracts. Preference will be given to first-class men who have had experience with precast, as well as in-situ concrete construction.—Applications, giving experience, qualifications, age and salary, in confidence to Contracts Manager, THE LONDON FERRO-CONCRETE CO., LTD., Maxted Close, Hemel Hempstead, Herts.

A GENTS REQUIRED to take charge of building and civil engineering contracts in the South. Applicants should have experience of precast, as well as in-situ concrete construction. Good conditions of employment with expanding company.—First-class men apply, giving experience, age and salary, to Contracts Manager, THE LONDON FERRO-CONCRETE CO., LTD., Maxted Close, Hemel Hempstead, Herts.

GENERAL FOREMAN REQUIRED for building and civil engineering contracts in the South. Applicants should have experience of precast, as well as in-situ concrete construction. Good conditions of employment with expanding company.—First-class men apply, giving experience, age and salary, to Contracts Manager, THE LONDON FERRO-CONCRETE CO., LTD., Maxted Close, Hemel Hempstead, Herts.

TAYLOR WOODROW CONSTRUCTION, LTD.

Have vacancies for CIVIL ENGINEERS at the head office at Southall. Applications are invited from men with wide site experience in major civil engineering projects to be engaged upon the planning of such works. Conditions of employment are attractive. A pension scheme is in operation.—Write, giving brief details of personal history and availability for interview to:

Personnel Manager,
TAYLOR WOODROW CONSTRUCTION, LTD.,
345 Ruislip Road, Southall, Middlesex.

SITE PLANNING AND PROGRESS ENGINEER: A national firm of chemical engineering contractors REQUIRE a Site Planning and Progress Engineer. Age 25-35. Previous planning experience desirable but not essential. Duties would primarily be on site but would also involve work at head office. Pension scheme.—Applications in writing, giving details of age, qualifications and previous experience, to Box V.2273. "The Contract Journal."

ASSISTANT MANAGER, sand and sandstone quarries. Sound knowledge of engineering and quarrying preferred. Must be hard-working, trustworthy, and keen. A cottage is available for the right man, and a starting salary of £750 p.a. is envisaged.—Write, giving details of age and experience, to the Manager, HINCKLEYS, LTD., New Windsor Rose Quarry, Huile Walkfield, Congleton, Cheshire.

CHARGEHAND NEEDED. Experienced in demolition by explosives and other methods, of mass and reinforced concrete structures. New Southgate. Apply Mr. Rhodes, PETER LIND AND CO., LTD., Fawley Refinery, Blackheath. Tel. 3113.

PLANT AND DEPOT MANAGER

REQUIRED immediately, to be responsible for workshops and stores, and to supervise the servicing of mobile plant employed on a variety of civil engineering and industrial contracts in South Wales. Experience with Eimco loaders, compressors and general contractors' plant essential. Age 30-45. The position will be permanent, and carries a good basic salary with bonus and usual allowances.—Please write, giving details of career and qualifications, quoting Reference 239, to:

The Personnel Officer,
THE CEMENTATION CO., LTD.,
20 Albert Embankment, London, S.E.11.

CASHIER/TIMEKEEPERS, experienced, REQUIRED for large firm of civil engineering contractors, for extensive contract in Middlesbrough.—Write, stating age, experience, and salary required, to Box V.2376. "The Contract Journal."

EXPERIENCED PLANT FITTERS WANTED for work in Ealing district. Only those resident in West London area need apply. Good wages and conditions.—Apply PERCY BILTON, LTD., Brunhill Road, off Hanger Lane, Ealing, W.5.

SUBSTANTIAL building civil engineering organisations offer appointments to several fully experienced ESTIMATORS. Salaries, allowances and conditions to match the calibre of applicant. Promotion and permanency are features of these jobs. Write personal and experience particulars to Box V.2423. "The Contract Journal."

APPOINTMENTS VACANT

ESTIMATOR AND COSTING CLERK to final account REQUIRED for civil engineering and public works contractors. Must have had experience in gas, water, sewer and G.P.O. contracts. State experience, and salary required.—Write Box V.2371. "The Contract Journal."

TURRIFF CONSTRUCTION CORPORATION REQUIRES several QUANTITY SURVEYORS of senior and intermediate standard to join a team operating over a nation-wide pattern of contracts, building and civil engineering. Excellent opportunities for men of appropriate experience, with drive and initiative. Attractive salaries, bonus and pension scheme.—Write for interview, London or Warwick. Group Personnel Manager, Budbrook Road, Warwick.

WORKS MANAGER, with experience in all types of contractors' plant machinery, REQUIRED for Hanworth, Feltham, Middx., depot. Preferably residing convenient to this address. Accustomed to controlling fitting and operating staff, general works administration, and with sound engineering past employment in contractors' machinery and plant hire. Age 30-40. Good salary, plus pension scheme. Apply KINGSTON PLANT HIRE, LTD., Twickenham Road, Hanworth, Middx. Phone: FELtham 4084/S.

PLANNING ENGINEERS

An excellent opportunity exists for TWO PLANNING ENGINEERS of senior capability in the structural department of a prominent national engineering firm. One will be required to assist in the general running of a planning office engaged on the comprehensive operational programming of structural and building contracts. The other will specialise in formwork methods and their application, including the development of special techniques. Both appointments will generate prospects for soundly experienced suitably qualified men. A progressive approach and outlook are vital factors in these appointments rather than precise limits of age, and further explanation and discussion with interested candidates will readily be arranged. The company's existing staff are fully informed of the particular requirements.

Reply, in confidence, with details of age, experience, and all relevant personal particulars, to:

BOX PE.3567, A.K. ADVERTISING,
212A Shaftesbury Avenue, London, W.C.2.

NATIONAL building contractors invite applications from DESIGNER/DRAUGHTSMEN, for work in their head office, London. The duties will involve the design of formwork schemes for major contracts in London and Southern England. The positions offer interesting and varied work, and good opportunities for progress. Good organisational qualities. Applicants should have had experience of this type of work and should have a good knowledge of reinforced concrete. Please send full details to Box NB.3555, A.K. Advertising, 212A Shaftesbury Ave., London, W.C.2.

GENERAL FOREMAN REQUIRED to supervise works of main drainage, comprising large concrete pipes. Write, stating age and experience, to A. BRETT (CONTRACTORS), LTD., Grimsargh, near Preston.

GENERAL FOREMAN REQUIRED to supervise the laying of large water mains.—Apply, stating age and experience, to A. BRETT (CONTRACTORS), LTD., Grimsargh, near Preston.

RAYMOND INTERNATIONAL (U.K.) CONSTRUCTION, LTD.

REQUIRE the following for work on large contract in Merseyside area:

ONE TOP-GRADE DRIVING FOREMAN
ONE TOP-GRADE FORMER FITTER (Plant)
TWO FIRST-CLASS FITTERS (Plant)
ONE FOREMAN WELDER

Top rate with overtime and subsistence for the right men.—Apply:

RAYMOND INTERNATIONAL (U.K.) CONSTRUCTION, LTD.,
Wingate House, 93/107 Shaftesbury Avenue, W.1.

RAILWAY and civil engineering contractors REQUIRE SITE ENGINEERS capable of taking complete charge of medium-size civil engineering contracts. Prospects of trackwork advantageous but not essential. Applications initially from Scotland, but candidates must be fully mobile and hold valid driving licence.—Apply in writing, giving full details, to GRANT, LYON AND CO., LTD., Scotter Road, Scunthorpe, Lincs.

ENGINEER ESTIMATOR REQUIRED by growing firm of civil engineering contractors. Head office appointment. Excellent working conditions and prospects. Only those with adequate experience and capable of high performance need apply.—Write, giving details of age, experience, and salary required, to GRANT, LYON AND CO., LTD., Scotter Road, Scunthorpe, Lincs.

ASSISTANT SURVEYOR WANTED by civil engineering contractors to assist Quantity Surveyors and Estimators. Ideal prospects for advancement.—Apply, giving details of age, experience, salary required, to GRANT, LYON AND CO., LTD., Scotter Road, Scunthorpe, Lincs.

EXPORT SALES

The makers of Muir-Hill dumpers and loaders REQUIRE a YOUNG MAN with civil or mechanical engineering background, plus fluency in European language, and a sympathetic approach to other nationalities and races to train with their home sales force as an OVERSEAS REPRESENTATIVE. Based on Manchester.—Apply to:

J. L. Sturrock, Sales Director,
E. BOYDELL AND CO., LTD.,
Old Trafford, Manchester, 16.

PART-TIME SURVEYOR for pricing and measuring Post Office work, Watford area.—Write Box V.2391. "The Contract Journal."

A WELL-KNOWN national company wishes to interview applicants for a post in their built-up roofing department, in the Manchester area. The position offers scope and advancement to the successful applicants who should be about 25 years of age and of good personality and educational background. Previous experience in the building industry is essential, and applicants from the architects and quantity surveyors' professions will be preferred. A period of training will be provided in London.—Write, with full details, in confidence to Area Manager, Box V.2413. "The Contract Journal."

APPOINTMENTS VACANT

THE GAMMON GROUP of civil engineers and reinforced concrete specialists offer the following vacancies in Pakistan: (1) CONCRETE SUPERINTENDENT: Must be experienced in the art of making and placing concrete by modern methods and be able to control batching plants, concrete mixes, and site laboratory. He should have wide experience in control of a large labour force and be able to discuss matters intelligently with clients' resident inspectors. Salary £1,900 p.a. tax free, with free quarters. Single man. Initial engagement for 12 months followed by one month's paid leave; (2) BRICK-LAYER/PLASTERER SUPERINTENDENT: Must have had several years' experience in the manufacture of bricks as well as bricklaying and plastering, and be able to control labour force and discuss matters with clients' inspectors. Salary £1,900 p.a. tax free with free quarters. Single man. Initial engagement for 12 months followed by one month's paid leave.

(3) SENIOR MECHANICAL FITTER: Must be a well-known fitter with wide experience in the maintenance and overhaul of civil engineering contractors' plant and able to take charge of, and lead, a small team of native fitters. Salary £1,600 p.a. tax free, with free quarters. Single man. Initial engagement for 12 months followed by one month's paid leave.

These appointments are for men of character and drive, with a wider than average experience and, for successful men, they could lead to extended employment with the Gammon Group of Companies.—Apply in writing, giving full particulars, to J. C. GAMMON (ENGLAND), LTD., 302 Sloane Street, London, S.W.1.

W.M. AIREY AND SON (LEEDS), LTD.—SITE AGENTS.—Site Agents are REQUIRED who have been craft trained, had experience on major industrial contracts, and had control of contracts up to a value of £500,000. Sites to be controlled are all in the Leeds and West Riding area. The company has an attractive salary policy, and a contract employment will be offered to the successful candidates at a salary commensurate with their experience.—Apply in writing to W.M. Airey and Sons (Leeds), LTD., Eldon House, Woodhouse Lane, Leeds, 2.

CONTRACTS MANAGER REQUIRED immediately by owners in the London area. Age 35-45 years. Preference to holders of civil engineering degree. Salary envisaged in region £3,000 p.a. Write Box V.2415. "The Contract Journal."

EXPERIENCED ESTIMATOR REQUIRED by Yorkshire firm of building contractors. Good opportunity with progressive company. Pension scheme in operation.—Write, stating age, experience, and previous employers, and salary required, to Box V.2411. "The Contract Journal."

CONTRACTS MANAGER REQUIRED to take control of the contracts division of an old-established medium-sized building and civil engineering contractors. Applicants should have good technical knowledge and extensive experience in the managements of contracts. A professional qualification would be an advantage. A pension scheme is in operation within the organisation, and the vacancy offers an opportunity with exceptional prospects. Full details of age, qualifications, experience, and salary required, to the Managing Director, GEORGE CALVERLEY AND SONS (CONTRACTORS), LTD., Evington Valley Road, Leicester.

CONTRACTS SUPERVISOR REQUIRED to supervise medium-sized building and civil engineering contracts in the Midlands. A sound practical knowledge of the industry is essential, and the vacancy offers exceptional prospects to a man with drive and organising ability. A pension scheme is in operation within the company.—Applications, stating age, experience, and salary required, to the Managing Director, GEORGE CALVERLEY AND SONS (CONTRACTORS), LTD., Evington Valley Road, Leicester.

ESTIMATORS REQUIRED by CORROSION TECHNICAL SERVICES, LTD. Experience of acid-resistant construction not essential. Good prospects for the right men.—Apply in writing, giving full particulars of age, qualifications and experience, to Sunleys Island, Great West Road, Brentford, Middx., or telephone Isleworth 8445.

SETTING-OUT ENGINEER REQUIRED for contracts in U.K. Good conditions, salary car allowance and pension scheme in operation.—Write, giving full particulars, to Box V.2417. "The Contract Journal."

A GENT REQUIRED for large civil engineering contract in Southern England. Must be fully experienced in earthworks and reinforced concrete work. Good prospects and conditions, pension scheme, etc.—Reply, stating age, experience, and salary required, to M. J. GLEESON (CONTRACTORS), LTD., C.E. Dept., Haredon House, London NW.9. North Cheam, Surrey.

ENGINEER REQUIRED for setting-out road and sewer contracts in Bucks., Berks. and Oxon. Must be accurate in use of instruments and capable of running small contracts. Pension and bonus scheme in operation.—Write, stating age, experience, and salary required, to Manager, Dept. M.W., SYDNEY GREEN AND SONS (CONTRACTORS), LTD., Henley-on-Thames, Oxon.

ASSISTANT ESTIMATOR—Vacancy with manufacturers of chain link fencing, stonework and gates. Commencing salary approx. £12 p.w. according to experience. Knowledge of trade essential and draughtsmanship useful. Five-day week. Pension scheme. Applications, in writing, to PROVE BROS., LTD., 126 Rickmansworth Road, Watford, Herts.

For Advertisements received too late for classification see page 425

APPOINTMENTS WANTED

ENGINEER, married, aged 32, SEEKS a PROGRESSIVE POSITION with a company in Britain commencing in the autumn of this year. Seven years' sewerage and water main experience as agent with contractor in England, and the last 5½ years as project engineer on the construction of sewer networks in Ontario, Canada.—Write to M. J. WILKIN, 3281 Woodlawn Avenue, Windsor, Ontario, Canada.

A GENT, 45, REQUIRES APPOINTMENT in south-east. Lifetime experience contracting, bridges preferred.—Write Box W.2416. "The Contract Journal."

PLANT FOREMAN, 34, keen, conscientious, experienced, seeking position with progressive and expanding company.—Write Box W.2424. "The Contract Journal."

A GENT or FIELD SUPERINTENDENT. All phases of heavy construction, pipelines, modern road construction, etc. Overseas experience, Canada, Britain, Africa and Middle East. (Canadian). Write Box W.2393. "The Contract Journal."

**SURVEYS
AND SETTING OUT**
FOR
ESTATES, MOTORWAYS
ROADS AND CITY
DEVELOPMENT AREAS

THE SITE SURVEY COMPANY
LONDON, S.E.3
TELEPHONE LEE Green 7444

APPOINTMENTS WANTED

SENIOR ESTIMATOR DESIRES CHANGE. Wide experience of building and civil engineering. Good-class work. Write Box W.2382, "The Contract Journal."

AREA MANAGER (building and civil engineering) DESIRES CHANGE to progressive organisation. Could reorganise company, introducing modern methods throughout. Write Box W.2374, "The Contract Journal."

CIVIL ENGINEERING AGENT, age 43, presently engaged, SEEKS NEW APPOINTMENT in the U.K. as SITE MANAGER or major-grade management of medium-sized contracts. Experience covers negotiations, planning, estimating and construction on variety of works, U.K. and overseas, including power stations and marine structures. Good organiser and administrator. References avail. as to ability and integrity. Write Box W.2385, "The Contract Journal."

QUALIFIED ACCOUNTANT/COST ACCOUNTANT, Q with several years' experience in the civil engineering industry SEEKS RESPONSIBLE APPOINTMENT preferably London or the south. Write Box W.2389, "The Contract Journal."

C.E. CONTRACTS MANAGER, 25 years' experience available, SEEKS POSITION with medium-sized contractors. Write Box W.2412, "The Contract Journal."

CIVIL ENGINEER, qualified, experienced in all phases of construction, DESIRES A RESPONSIBLE POSITION in head office. Age 38. Married. Commencing salary required £1,500 p.a. Southern Counties. Write Box W.2425, "The Contract Journal."

WORK REQUIRED

MOTOR BOAT OWNERS REQUIRE CONSTRUCTIONAL WORK. ATTENDANCE, PERSONNEL GOOD TOWARDS CRAFT. Craft and labour supplied. Apply: THOMAS BROS., 62 Sunbury Road, East Ham, London, E.6. Telephone: GRA. 6697/3151.

SITE CLEARANCE, BULK EXCAVATION. JAMES AND CO., LTD., Trading Estate, Slough. Telephone: Slough 20361—Ext. 4.

SAM BOOTH, LTD. Perrymount Chambers, Haywards Heath, Sussex. Staff D8s. with Bulldozer and Caterpillar 463 Scrapers. Write Box P.2412, "The Contract Journal."

EARTHMOVING, LEVELLING, LAND DRAINAGE, RECLAMATION. Consult the Surveyor Specialists. SURFACE MAINTENANCE SERVICES, LTD. 124 Old Christchurch Road, Bournemouth. Tel. 24673. Branches throughout the country.

WANTED, EXCAVATION, SITE CLEARANCE and DEMOLITION WORK. R. BARKER (PECKHAM), LTD., New Cross 3337.

EXCAVATION SUB-CONTRACTS. Technical staff available to analyse, programme and price complex projects. Particular attention given to finish and compaction. D9, D8, TD18 and TD14 Scrapers, Excavators, Loading Shovels and Lorries available with competent and imaginative supervision for execution of work.—JACK HAMPTON, Broadway Farm, Blacknest, Alton, Hants. Tel.: Bentley 2241.

BULK EARTHMOVING, direct contract or sub-contract. ALAN BULLDOZERS LTD., SOAR 155 for HIRE.—FRANK B. WALPOLE, LTD., 126 Wins Road, Leighton Buzzard, Beds. Leighton Buzzard 3351.

SPECIALISED EXPLOSIVES SERVICES. U.K. and OVERSEAS MOBILE UNITS coverage on ex-service strong points, sea walls and dangerous structures, etc.—124 Old Shoreham Road, Southwick, Sussex. Tel.: Southwick 3791 or Shoreham 4193.

FOR HIRE—One Drott and Six TIPPER LORRIES. SITE CLEARANCE, Direct or sub-contract. I. W. DOYE AND CO., Demolition Contractors, 188 Plumstead High Street, S.E.18. Woolwich 6318.

UPROOTING—TREES, STUMPS, HEDGES, etc. We have the most experience and all modern equipment.—T. GRAVESON, LTD., Warton, Carnforth, Lancs. Telephone: Carnforth 381 and 382.

BULK EXCAVATIONS, any quantity quoted for. Own plant and lorries. COFF AND SON (EXCAVATIONS), LTD., Buckhurst Hill, Chigwell, Ascot, Berks. Ascot 1026/7/8.

FOR HIRE—MIDLANDS AREA: D4s, 10RBs, COMPRESSORS, DROTTS.—KINGS NORTON EXCAVATORS, LTD., Telephone: Sedgley 2513.

D8s, D7s (1960), with Scrapers or Dozers, Powershift TRAXCAVATORS and DUMP TRUCKS available for EARTHMOVING CONTRACTS or HIRE in the south of England.—WADSWORTH (DEMOLITION AND EXCAVATION), LTD., Sidmouth Road, Exeter 66246.

BULK EARTHMOVING by DW21s, D9s or D8s. STANTIAN PLANT, LTD., Effingham Street, Rotherham. Telephone: Rotherham 78271-2.

ERECTION and DISMANTLING. Structural Steelwork and all types of Prefabricated Components. Speedy and efficient service.—ERECTORS, 80 Builwell Crescent, Cheshunt, Herts. Waltham Cross 22564.

SOILING, SEEDING and TURFING. Site Clearance, Excavation and Levelling Work undertaken in any part of the U.K. at competitive prices.—GILLIAM, Purley, Surrey. UPLANDS 9222/6.

WORK REQUIRED

CONTROLLED EXPLOSIVES, LTD., specialise in the controlled fragmentation of mass and reinforced concrete inside or outside buildings. Demolition of bridges and chimneys, mass rock, trenching, sewage beds, engine beds, etc., and deep drilling for quarries. Particulars from 11 Church Street, Oldbury, Birmingham. Telephone: BRoadwell 3117.

If TREES, ROOTS or UNDERGROWTH feature in your contract, we would be pleased to quote for their economical disposal.

BAGSHOT SAWMILLS, LTD., 32 London Road, Camberley, Surrey. Telephone: 14.

BULK EXCAVATION WANTED.—We have our own staff of Engineers, Civil Engineers, and have the following machines ready for work: D9s, D8s, D7s, D6s, D4s, with Dozers, Scrapers, and Rooters. Also Ruston Excavators, with all equipments, and a fleet of new Tipping Lorries. No job is too small or too large.—SMITHS PLANT HIRE AND CONTRACTORS (CHELTENHAM), LTD., "Southam Court," 98 Prestbury Road, Cheltenham, Glos.

EXCAVATION.—Roads, Sewers, Concreting, Draining, etc. CONTRACTS WANTED. Qualified Engineer, Contracts Sub-contractor, for work anywhere.—HARRISON, Wetherfield Manor, Brainerd, Essex. Telephone: Shalford Green 464.

WANTED, HIRE or CONTRACT WORK for modern fleet of DW21s, D9s, D8s, 15-ton Rear Dume Euclids and 35RB Face Shovel.—APPLY: BODRICK AND RYAN, LTD., 421 Nottingham Road, Ilkeston, Derbyshire. Telephone: 4381/2.

EARTHMOVING, EXCAVATION, CONTRACT or HIRE. Bulldozers, Scrapers, Traxcavators, Trenchers, etc.—Phone: Chiswick 8511/2, Maidstone 7294/5/6, TRACTORS HIRE (CHISWICK), LTD., 300 Chiswick High Road, W.4.

IF GRADING, SEEDING, TURFING and PLANTING form part of your CONTRACT, we will be pleased to quote to you.—HOLDROP, 139 Bells Hill, Barnet. Telephone 9111.

DROTT SKID SHOVEL BT6D, fitted with Boughton Ditch Witch or similar at keenest rate.—JAMES COOPER, LTD., 28 Kensington Church Street, London, W.8. Tel.: Western 3412.

AVAILABLE for HIRE or CONTRACT WORK. A fleet of Five Caterpillar D9 TRACTORS, with 7294/5/6, Scrapers. Very competitive rates quoted for bulk earthmoving or long hire. Also available, D8 and D7 TRACTORS.—APPLY: GAYLORD, EDWARDS AND CO., LTD., Carlton Road, Nottingham. Telephone: 50881.

SITE CLEARANCE CO., LTD., specialists in removal of trees and roots. Explosion Engineers and Demolition Contractors.—Delph Dene, Quarry Lane, Appleton, Warrington. Telephone: Stockton Heath 309.

BULK EXCAVATIONS and SITE WORKS undertaken DIRECT or on SUB-CONTRACT basis. Quotations given for large or small contracts anywhere.—S. AND L. BULL BROS., LTD., 26A High Street, Winchester. Telephone: Winchester 2264.

INVENTIONS

INDUSTRIAL ENGINEERS OF REPUTE invite, in strict confidence, DETAILS OF INVENTIONS, with object of manufacturing and world distribution. Write Box K.L.517, "The Contract Journal."

PROFESSIONAL SERVICES

CIVIL ENGINEERING CLAIMS.—Director/Consultant Engineer, with long and varied experience in high-level negotiation of contractors' claims, OFFERS SERVICES on a fee/commission basis. Write Box P.P.392, "The Contract Journal."

ACCOMMODATION

CARAVANS TO RENT for men with families. Rent £7 to £17 per month. Delivery anywhere. LANDSMAN'S SERVICES, Buckden, Huntingdon. Telephone: Buckden 287.

ACCOMMODATE YOUR EMPLOYEES in a cosy 4-berth CARAVAN, fully equipped with heating, lighting, cooking and washing facilities. Hire rates from 50/- per week for four persons. Caravans delivered anywhere.—NORTHERN CARAVAN DISTRIBUTORS, Handforth, Ches. Tel.: Mercury 4255/6.

DIVING

DIVING WORK REQUIRED. All classes. Competent divers.—A. J. PARSOE, Diving Contractor, 14 Haig Avenue, Brighton, 6. Telephone (0323) 61228.

DIVERS and FROGMEN at immediate notice. DIVING SPECIALISTS, LTD., Dartford 24139. Night—Farningham 2452.

BUSINESSES—SALE OR WANTED

FOR SALE, SANDPIT, fully equipped. Going concern, near Corby, Northants.—BRIGSTOCK SAND AND GRAVEL, LTD., 29 Northampton Road, Rushden, Northants. Phone: Rushden 2642.

FOR SALE, Essex BUILDERS AND CONTRACTORS' BUSINESS. Large yard with well-equipment workshop, stores and offices. Staff approx. 50. Turnover approx. £150,000. Price £30,000. Owner retiring.—Write Box X.2339, "The Contract Journal."

ESTABLISHED CONTRACTORS' PLANT HIRE AND MERCHANDISING BUSINESS for SALE as going concern. Turnover £100,000 p.a. Freehold premises with yard (10,000 sq. ft.), workshop, offices, etc., near Central London. Directors remain if required for given period. Price £25,000. Stock and equipment at valuation, if required. Write Box X.2360, "The Contract Journal."

CIVIL ENGINEERING AND PLANT HIRE CONTRACTORS for SALE. Large area of modern buildings, all workshops and offices, freehold site of 5 acres in large town on main line adjacent new Yorkshire Motorway. Room for few houses. Annual turnover about £250,000. Present management would remain. Write Box X.2375, "The Contract Journal."

CENTRAL SUSSEX,—Long-established and very productive BRICKWORKS for SALE as a GOING CONCERN. Modern buildings and equipment; service cottages; substantial output; in all about 25 acres of land, including substantial clay pits, etc. Further particulars, apply: CLIFFORD DANN, Chartered Surveyor, Fitzroy House, Lewes. Telephone 750.

FULLER HORSEY SONS & CASSELL**AUCTIONEERS AND VALUERS****OF PLANT, MACHINERY AND FACTORIES**

Since 1807

10 LLOYDS AVENUE

LONDON E.C.3

TELEPHONE: ROYAL 4861

Auctions

SALE BY AUCTION

WING AIRFIELD, BUCKS.

By Order of Secretary of State for Air.

The former

ADMINISTRATIVE CENTRE OF THIS AIRFIELD

comprising of a large area of concrete with some 50,000 sq. ft. of Buildings, Farmhouse and 138 acres of former good Farmland and ring fence. Very suitable as depot for public works contractor (subject to planning consent). Vacant possession of the whole on completion.

For SALE by AUCTION at AYLESBURY, BUCKS. on WEDNESDAY, 3rd AUGUST, 1960. Particulars from Auctioneers:

W. BROWN AND CO. 2 Church Street, Aylesbury (Tel. 4706); or 41 High Street, Tring (Tel. 2235).

SALES BY TENDER**BOROUGH OF HARROW****SALE OF SURPLUS PLUMBING MATERIALS**

TENDERS are invited for the PURCHASE from the Corporation of SURPLUS PLUMBING MATERIALS. Further details from the BOROUGH ENGINEER, Cottessmore, Uxbridge Road, Stanmore, to whom TENDERS must be submitted by 8th AUGUST, 1960.

HAYES AND HARLINGTON URBAN DISTRICT COUNCIL

DISPOSAL OF REDUNDANT TIME SWITCHES

TENDERS are invited for 500 second-hand 15-day Household Clockwork VENICE TIME SWITCHES varying in size and condition. The time switches may be inspected by appointment at the Works Department Depot, Minet Drive, Hayes, Middlesex (Tel. Hayes 2317).

Tenders, in sealed envelopes, endorsed "Tender for Redundant Time Switches," not indicating the sender, to be received by CLERK AND SOLICITOR OF THE COUNCIL at above address by 31st AUGUST, 1960. The Council does not bind itself to accept the highest or any Tender. Canvassing disqualifies.

FINANCE

HIRE PURCHASE FINANCE available for all types of MACHINERY, etc.—APPLY: D. EVERARD, LTD., 62 Oxford Street, London, W.1. MUSEUM 0811.

AGENCIES

EFFICIENT newly formed sales organisation with service and stocking facilities centred on Liverpool and Blackpool. SEEK PLANT SALES and HIRING AGENCY.—Letters to Box X.2362, "The Contract Journal."

GUNITE SPECIALISTS offer an additional REPRESENTATION to free-lance REPRESENTATIVES with existing connection with civil engineering contractors, particularly concerned in the London, Manchester and Cardiff areas. Knowledge of reinforced concrete desirable. Commission and retainer.—Give full particulars to Box X.2387, "The Contract Journal."

FREE-LANCE SALESMAN, with established contacts civil engineering and building, REQUIRES POWER TOOL AGENCIES London and S.E. Write Box X.2397, "The Contract Journal."

HORTICULTURAL

TOP SOIL.—200,000 cubic yards available, delivered in large and small quantities. Soil supplied ex site in approved cases.—SATHAM AND CO. (CONTRACTORS), LTD., Westward House, Guildford Rd., Lightwater, Surrey. Bagshot 2037 and 2400.

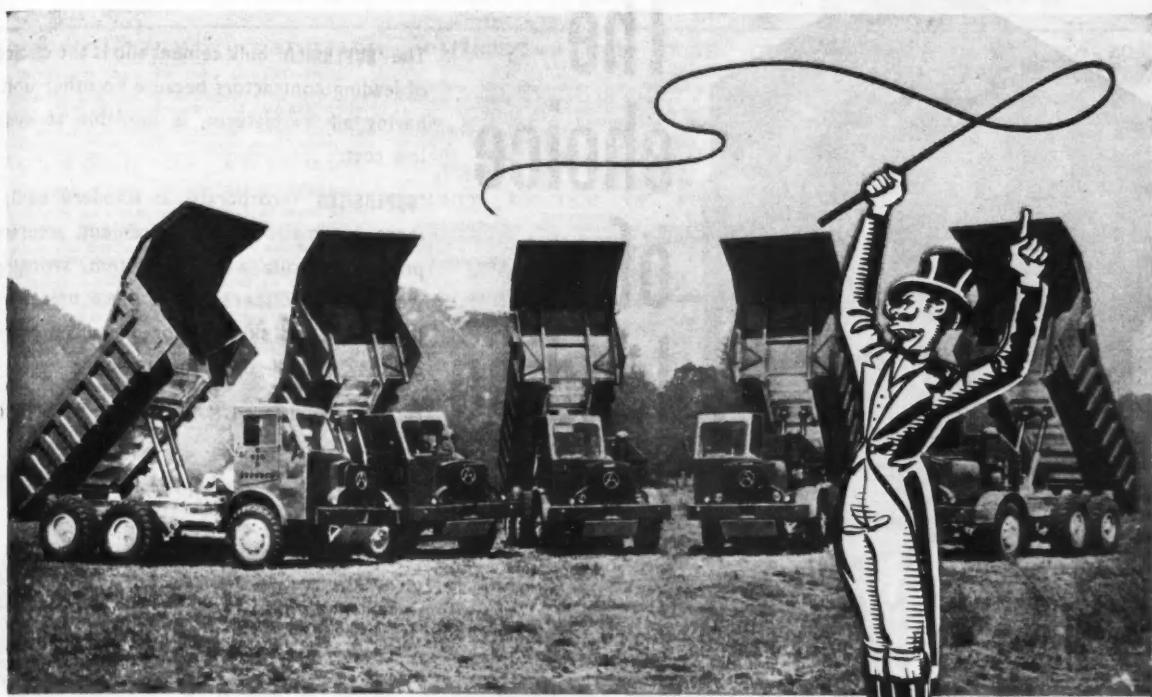
A KEEN QUOTATION for your TURFING, A SEEDING and HEDGING CONTRACTS: London and Home Counties.—R. J. ENSTONE & SON, LTD., Head Office: 34 Alma Road, St. Albans. Tel. SS22.

TURFING—SEEDING—HEDGING. Quotations for all branches of landscape work anywhere in the U.K. C.E. contracts a specialty.—WATER BROOKS, Horsforth, Leeds. Horsforth 2364.

MASSEY-FERGUSON 65 TRACTORS for HIRE. Also comprehensive range of ATTACHMENTS, including Tipping Trailers, Loaders, Rotovators, and all Land Cultivation Implements, Turf-cutting Machines, etc. C.E. contractors catered for.—RINGWAY CONTRACTORS, LTD., Horsforth, near Leeds. Telephone: Horsforth 4805.

TURFES.—Machine-cut, 3ft. x 1ft., close mown, weed-treated, 60/- per 100. Keen trade rates. We would be pleased to quote for your levelling and laying.—E. R. RANCE, LTD., 24 Sheepcot Lane, Watford. Telephone: Garston 2725.

ROTARY CULTIVATORS available for HIRE or CONTRACT WORK. General Land levelling, Earthmoving undertaken.—JAMES COOPER, LTD., 38 Kensington Church Street, London, W.8. Western 3412.



Allez oop!

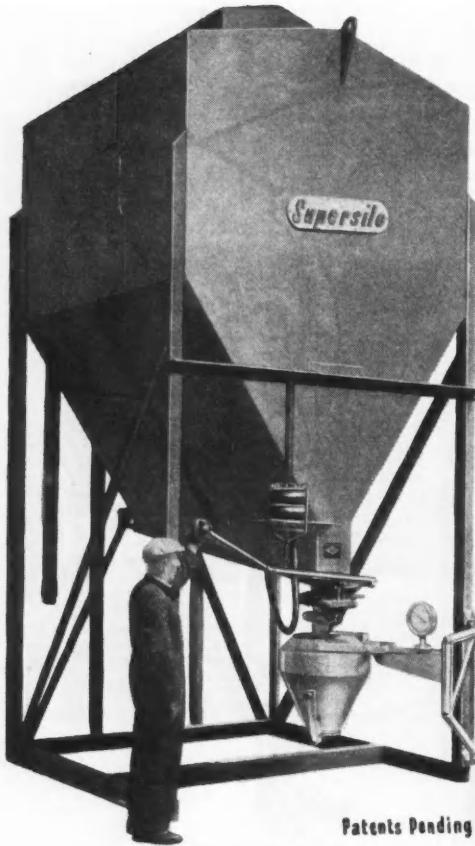
In a setting reminiscent of the Circus these massive Dumper, all fitted with Pilot Hydraulic Tipping Gear, like their counterparts of the Big Top, strong, sturdy and utterly reliable are part of a first consignment of some 47 Atkinson Vehicles recently delivered to South African Railways. If further evidence of the superiority of this Combination of Vehicle and Tipping Gear were required a further, recent, order for 14 more is justification itself.

In addition to their range of Tipping Gear, Pilot Works Ltd. specialise in the production of Bodywork of all kinds. Whether made from Wood, Alloy or Steel, of special design or to standard requirements, only the finest materials and craftsmanship go

into the construction of these bodies so that they will stand up to all the hard work and rough usage to which they may be subjected. Write for particulars of standard, wooden Body sizes and capacities, and weights and measurements of Materials.

PILOT

*Hydraulic
Tipping Gear*



Patents Pending

BLAW KNOX LTD

The
choice
of
leading
contractors...

"Supersilo"

Box 146, 90/94 Brompton Road, London, S.W.3
Telephone: Kensington 5151

BK 502

INDEX TO ADVERTISERS

A	Page	G	Page	R	Page
A.B.C.D. (Ravens Park), Ltd.	396	Gazeway Plant Hire, Ltd.	11b	Raylor, H. B., & Co., Ltd.	486
A.C. Plant & Hire, Co., Ltd.	471	G.M. Power Plant Co., Ltd.	402	Record Tower Cranes	402
Acrow (Engineers), Ltd.	376	Goodwin-Barbry & Co., Ltd.	xix	Roadless Traction, Ltd.	489
Acworth Plant Hire, Ltd.	468	Grayston Plant & Engineering Co., Ltd.	399	Road Machines (Drayton), Ltd.	370, 371
A.E.C., Ltd.	vib	Green Bros. (Brandon), Ltd.	398	Roads & Runways (Plant Hire), Ltd.	490
Aidu Equipment Co., Ltd.	376	Greenham Equipments, Ltd.	472	Ruston-Bucyrus, Ltd.	xii, xiii
Allam, E. P., & Co., Ltd.	villa, 372	H		Ruston & Hornsby, Ltd.	401
Allen, John, & Sons (London), Ltd.	466	Hardun & Sons, Ltd.	ib		
Allen, John, & Sons (Oxford), Ltd.	xx, 462	Hill, Richard, Ltd.	483		
Armstrong Cork Co., Ltd.	469	J			
Arup & Arup, Ltd.	villa	Johnson, C. H., (Machinery), Ltd.	370		
Audax	396, 398	Joy-Sullivan, Ltd.	viii		
Austin Motor Co., Ltd.	309	L			
B		Lafarge Aluminous Cement Co., Ltd.	311		
Bamford, J. C., (Excavators), Ltd.	lv, v	Leach, Hubert C., Ltd.	492		
Barking Developments Co., Ltd.	311	Lead Wool Co., Ltd.	383		
Benford, Ltd.	393	LeTourneau-Westinghouse Co.	397		
Beresford, James, & Son, Ltd.	488	Levveline Concrete Pumping Co., Ltd.	400		
Bigwood Bros. (Birmingham), Ltd.	460	Lister, R. A., & Co., Ltd.	407		
Blaw Knox Bridge	Cover i	Low, James F., & Co., Ltd.	vi		
Blaw Knox, Ltd.	424, 464	M			
Bowen, James, & Son, Ltd.	xvii	Machinery Continental, Ltd.	374, 375	Tarmac Vinculum, Ltd.	406
Braithwaite & Co. Engineers, Ltd.	485	Mackay Industrial Equipment, Ltd.	1c, 1ic, 1lc, 1vc	Tarslag, Ltd.	407
Branch, Jack, (London)	396	Marshall Sons & Co., Ltd.	Cover x	Thorn, J., & Sons, Ltd.	382
Briant, W. J., & Sons, Ltd.	378	Martin, Black & Co. (Wire Ropes), Ltd.	vii	Thwaites Engineering Co., Ltd.	viii, ix, xvi, xvii
Broom & Wade, Ltd.	378	Megator Pumps & Compressors, Ltd.	xiv	U	
Byard & Co. (Engineers), Ltd.	463	Michigan (Great Britain), Ltd.	480	United Dominions Trust, Ltd.	490
C		Midland Tunneling Co., Ltd.	484	Universal Divers, Ltd.	406
Cartruk, Ltd.	398	Mobile Haulage, Ltd.	403		
Case, J. I., Co., Ltd.	491	Moore's Plant, Ltd.	Cover iv	V	
Challan Tractor Co., Ltd.	Cover iii	Mutual Finance, Ltd.	310	Val de Travers Asphaltite Paving Co., Ltd.	466
C.E.T. (Equipment), Ltd.	379	N		Vales Plant Register, Ltd.	ii
Chadburns (Liverpool), Ltd.	468	Newton Sales Co., Ltd.	376	Valori, Frank, Ltd.	471
Cheshire Engineering Co., Ltd.	1a	Numec, Ltd.	466	Vigzol Oil Co., Ltd.	ii
Cohen, George, Sons & Co., Ltd.	369	O			
Continental Tool Co., Ltd.	482	Olding, Jack, & Co., Ltd.	viii	W	
Consolidated Pneumatic Tool Co., Ltd.	404, 415	P		Ward, Thos. W., Ltd.	373
Contractors Services, Ltd.	380	Palmer, G. I., & Sons	400	Warsop Power Tools, Ltd.	407
County Commercial Cars (Sales), Ltd.	467	Permanite, Ltd.	406	Waywarden, Ltd.	400
Cox, H., & Sons (Plant Hire), Ltd.	381	Pitt George, Ltd.	465	Weatherill, F. E., Ltd.	iv
Cripps, R., & Co., Ltd.	381	Pilot Works, Ltd.	470	Western Tuber Co., Ltd.	470
D		Planet Plant Hire, Ltd.	472	Wein Manufacturing (Sales), Ltd.	398
Davies, O. L., Ltd.	484	Polybond, Ltd.	408	Western Hire Co., Ltd.	398
Dillaway, P. W., Ltd.	1vb	Pumpcret Hire Co., Ltd.	372	Whitlock Bros., Ltd.	377, 379, 381, 383
Diving Specialists, Ltd.	398		492	Wilmot Plant Hire Co., Ltd.	484
Doe, Ernest, & Sons, Ltd.	384			Wood, Pritchett & Partners, Ltd.	394, 395
Dunlop Rubber Co., Ltd.	x, viii			Wright, V., (Leeds), Ltd.	486
E					
Eddison Plant, Ltd.	398				
Elmco (Great Britain), Ltd.	va				
English Electric Co., Ltd.	466				
Evans of Leeds	396				
F					
Foster, Arthur, (East Ham), Ltd.	396				

The Smith M.E.II Truck Crane in this photo
is owned by the Dublin Erection Co. Ltd.



M.E.II— the all-purpose **TRUCK CRANE**

*which is slicing job costs by
saving time and money on a wide
variety of construction duties*



Can lift up to 10 tons on the short boom
(25ft. length).

Additional sections (quickly fitted) vary the
boom length to 35, 45, 55, 65 or 75ft.

Extra height and range is achieved by using the
special 10ft. fly jib extension.

**SMITH PATENT POWER-LOWERING DRUM
FITTED AS STANDARD.**

Can be adapted for digging duties, using
shovel, dragline and back-hoe equipment.

Ideal for pile-driving.

Ample road speeds to suit all conditions.

**THOMAS SMITH & SONS
(RODLEY) LTD**

Crane & Excavator Works, Rodley, Leeds

Tel. Pudsey 2844

Wires: Smith, Rodley, Telex
(Telex No. 55105)

THE
CONTRACT JOURNAL
 INCORPORATING
 THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

THE CONTRACT JOURNAL
 Incorporating
 THE BRITISH CONSTRUCTIONAL ENGINEER
 and
 THE CONTRACTOR
 Established 1879

No. 4,231 Vol. CLXXVIII July 28, 1960

Editor:
 LAWRENCE McCARTHY

PRINCIPAL CONTENTS

	PAGE
John Sumner's Notebook	428
Activities at the Building Research Station: Recent Work of Interest to Engineers	429
Sydenham By-pass, Northern Ireland: Main Approach Road to Belfast	431
Evolution of Nuclear Plant Design: Future Reactors to Give Cheaper Power	432
Work of the Northern Ireland Housing Trust: Current and Future Building	433
In Parliament	434
Three-level Shopping Precinct in £1½m. Elephant and Castle Development	435
Pre-planning Cuts Cost of Telephone Exchange Building: New Ideas in Design	436
Restoration of 17th-Century Flamsteed House at Greenwich	437
Late Construction News	438
Office Block Built over Station Approach at Middlesbrough	439
Men and Movements	440
£320,000 Basildon Town Centre Contract	441
Completion of First Building on London's New Route 11	442
Talking of Safety, by "Dragee"	443
International Construction	444
Trade Section	445
CURRENT CONSTRUCTIONAL ACTIVITIES:	
Projects	449
Contracts	453
Awards	458

Publishers

The Contract Journal Co., Ltd.,
 32 Southwark Bridge Road, London, S.E.1.
 Telephone: Waterloo 3411 (7 lines).
 Telegrams: "Seejasir," Sedist, London.

Subscriptions

"The Contract Journal" can be supplied direct from the above offices. Subscriptions, payable in advance: Yearly, £5 4s. (post free); half-yearly, £2 12s. An order form appears on page 496.

Advertisements

Advertisement rates may be obtained on application to R. Binfield, Advertisement Manager.

SELECTING CONTRACTORS

THE Ministry of Works' intention to revise present procedure for listing possible contractors for its constructional work, reported in our last issue, is to be welcomed as a move to ensure that every contractor has a fair chance of being considered. But whether the Ministry is going about it in the right way is open to doubt.

The present approved list contains the names of some 17,500 firms, of which some 5,000 are general contractors and the remainder specialists. Any firm which considers it has the capacity to undertake work for the Ministry has always been able to apply to be put on the list but it is believed that this was little known among the medium and smaller builders. Before a firm is entered on the list the Ministry visits its premises, examines the work it has done and takes up references.

The list had its origin in pre-war days and during the war it was extended and kept up to date by information obtained from the Works and Buildings Priorities Committee, which kept records of major contractors and their capacity. This Committee was abolished in 1946, however, and since then the Ministry has relied upon the initiative of contractors for application to be included in the list and to keep the Ministry informed of changed circumstances.

Following an investigation, Mr. Harmar Nicholls, Parliamentary Secretary, came to the conclusion that the lists were out of date and so in September some 96,000 contractors will receive with their annual return form an invitation to apply to be placed on the list. Such applications which are judged satisfactory will be placed initially on a Provisional List and considered with firms on the Approved List when the Ministry draws up lists of firms to be invited to tender. Before being invited, the references of such a firm will be taken up and its premises and capabilities inspected. If it then comes up to Approved List standards it will be transferred to that list. To ensure that the present Approved List is up to date those firms on it are to be invited to report any changes in their organisation and capabilities; the Ministry particularly wants to hear of firms which can now carry out larger jobs than when they were first entered on the list.

This new procedure does not mean that an increase in M.O.W. work is envisaged, in fact, the reverse may be the case. On January 1 of this year, the Ministry had in force only 871 new works contracts and 618 maintenance contracts, so that every firm on the list cannot expect frequent invitations to tender.

Although firms employing less than five men are not going to be encouraged to apply it will be surprising if the Ministry is not flooded out with applications next September. The Ministry's invitation is not being extended to specialist sub-contractors at this stage but at the same time the Ministry will hardly be able to refuse to consider any applications submitted by specialists as there is already in being a list of such contractors. In the circumstances, one wonders whether it might not have been better if the Ministry, like many local authorities, had decided to advertise their contracts as and when they occur, inviting firms interested to submit their names from which a number could then be invited to tender. When this question was raised by *The Contract Journal* at a conference at the Ministry last week, Mr. Harmar Nicholls indicated that initially he had favoured such a procedure, but apparently he has been convinced otherwise!

It is apparently the Ministry's intention to classify firms on the new lists in regions and tenders will be invited regionally. This will be a reasonable enough arrangement for the smaller projects but for the larger works obviously contractors outside the region will be interested and some major jobs will call for bids from National contractors. The procedure in this case appears to be that the Ministry will endeavour to invite contractors outside the region or rely on the bigger firms to apply to tender. This does not somehow seem a very satisfactory arrangement and for the larger jobs at least we would urge the Ministry to announce them publicly, inviting applications from interested contractors.

John Sumner's Notebook . . .

PASSING the buck is a good old English custom, often attended by a degree of sly humour. I doubt, however, whether Mr. C. H. Foden, the surveyor to the Hereford Rural District Council, sees any humour, sly or otherwise, in it. Not if one draws the obvious inferences from a report he has presented to his council.

In the report he complains that some architects are giving their clients false information about delays in dealing with plans, wrongfully implying that the Hereford R.D.C. is responsible. "I have," writes Mr. Foden, "previously mentioned . . . my resentment that certain architects in Hereford inform their clients that their plans have been deposited for a considerable time with me, as the R.D.C. surveyor, and subsequent inquiries are made by the client which, in the initial stages, infer delays and lack of attention to these plans. I tell people, as they make these inquiries, that everyone can make a mistake, but investigation has invariably shown that no such plans have ever been deposited, and that this office is being used as the architect's excuse for not attending to the client's instructions."

I have a suspicion that Mr. Foden's plight is shared by his opposite numbers in other localities up and down the country. If my suspicions are well-founded, I would suggest that they take heed of Mr. Foden's proposals for dealing with the situation. They are given in his report, in which he adds: "I am content, at the moment, to report on the above matter only, but if there is a recurrence and the Public Health and Water Committee concurs, obviously further action should be taken in fairness to the reputation of this council. Unless the committee specifically instruct me not to do so, it is my intention in future to name in my report those architects who have given their clients false information regarding deposited plans."

This should make the architects think a bit.

I HAVE been gathering together some information regarding the case of Mr. William Clarke, the Edmonton builder. His

is a remarkable story. His family has lived in the district for over 60 years and when he left school and decided to become a builder he set himself up in business in Edmonton. It flourished. Today that business is no more. This is what Mr. Clarke says happened. He was established in Cumberland Road, Edmonton, and was doing well when, in 1957, the council made a compulsory purchase order on the land he was using. Mr. Clarke found another site in Montagu Road. Before purchasing he took legal advice and also contacted the council who told him the land was free from restrictions. He then bought the land and submitted plans for a two-storey building on it which the council approved. Then he sought permission to use the remainder of the land for a builder's yard. The council refused that permission, informing Mr. Clarke that it wanted the land for a car park and proposed making a compulsory purchase order on it. Mr. Clarke appealed and, following a public inquiry, his appeal was allowed, the Minister of Housing and Local Government holding that a builder's yard was a necessary adjunct to a builder's office.

You might think that this settled the matter. Not on your life. The Edmonton council then made a compulsory purchase order in respect of the whole of the site—including that part on which Mr. Clarke proposed to erect his office, the plans for which the council had already approved. By this time Mr. Clarke had spent about £200 on levelling the office site and had transferred plant there from various small depots. His office in Cumberland Road had been closed and nothing could be done at Montagu Road. He tried to run his business from his home address but for various reasons this was unsatisfactory, so once again he appealed against the council's decision. This appeal was dismissed, so Mr. Clarke is now in the position of having lost his site in Cumberland Road to the council and having had the council take over the land he bought in Montagu Road. He is still waiting for payment for this land, and he doesn't know whether he will get as much as he paid for it.

I wonder what the Edmonton town council's views are on all this? In the public interest I should have thought that some explanation from them is due. In the absence of an explanation there is bound to be created in the public mind an atmosphere not altogether dissimilar from that which pervaded the Crichel Down business.

ON my desk there lies the 207th number of *Wates News*, the monthly newspaper published by Wates, Ltd., the building contractors. The significant thing about this number is that it marks the 25th birthday of *Wates News* as a regular publication. It was first issued in June, 1935, when it was known as *Wates House News* and from that day onward it has improved and grown in line with the expansion and development of this remarkable company. Some of the contributors and editorial assistants associated with those early issues are still with the company, including Mr. L. R. Seaton, the present commercial manager, Mr. K. W. Bland, chief architect, Mr. A. W. Madger, the sales manager, and others.

Shortly before the second world war weekly publication began but after 72 issues this was discontinued on September 16, 1939, with an issue appropriately headed "Work of National Importance." A fortnightly series was introduced immediately and somehow the publication managed to keep going in duplicated form until 1944 when there was a big revival of interest.

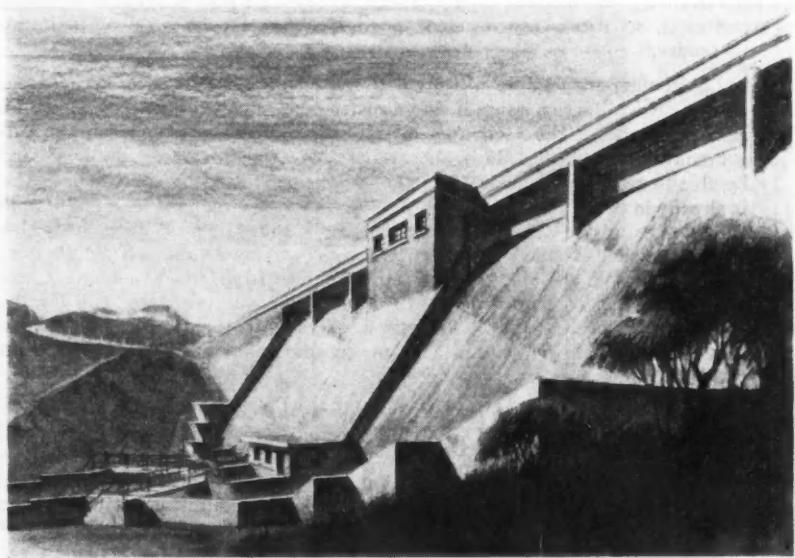
The big leap forward came in 1949 when Brendan Abrams, now with the Ministry of Works, brought out the first *Wates News* as a fully-illustrated newspaper. It soon gained popularity throughout the company and Abrams' editorship placed it in the forefront of industrial house journals. The high standards he set over the nine years during which he was associated with it have been well maintained and I would like to wish the journal and those associated with it all success for the future.

I mention these matters because the tenacity with which Wates have striven to produce this journal in the face of wartime and paper restriction difficulties is the complete answer to those firms, and there are many of them, who fail to understand the valuable part such an activity in a building concern can play in maintaining good labour relations. Taking into account the number of firms in the building industry only a mere handful publish a house journal. The remainder are missing out on a vital tool of management.

THERE was an interesting and charming little ceremony in London last week when Mr. L. A. Walden, the chairman of the National Joint Council for the Building Industry, presented a silver salver to Mr. G. W. Buchanan, who for 21 years has been chairman of the industry's Grading Commission.

The Commission has been a long-standing feature of the building industry's wage structure and the presentation to Mr. Buchanan also marked the winding up of its work. For 40 years it has been responsible for the system of grading the very large number of districts into which the country has been divided for wage rate purposes. It has been a monumental task involving countless thousands of hours of meticulous and detailed study of local and even, on occasion, parochial conditions. The National Joint Council had already announced its intention before last week's winding up of raising all districts below Grade A to Grade A next October.

The recognition given to Mr. Buchanan's contribution to the work of the National Joint Council and of the Grading Commission is well deserved. He has played no small part, particularly during the war years, in maintaining the stability of an industrial agreement which remains second to none.



An artist's impression of the Hawkridge gravity dam which is being constructed for Bridgwater Borough Council. When completed in 1962, it will be 77ft. high and 500ft. long. The contractors are M. J. Gleeson, Ltd., North Cheam, and the consulting engineers are John Taylor and Sons, Westminster

ACTIVITIES AT BUILDING RESEARCH STATION

Recent Work of Interest to Engineers

THE whole field of building research has recently been reviewed by the Director of Building Research⁽¹⁾. It ranges over all aspects of the structural and functional behaviour of buildings, and embraces also the materials of construction, the construction processes, and the costs both of these and of subsequent maintenance.

For the engineer, the work on structural behaviour, on materials of construction including the ground of the foundation), and on construction processes and costs is of most interest. In this, the third periodical review of work at the Building Research Station, recent Papers on each of these subjects will be briefly referred to. A bibliography is given at the end.

Structural theory is the engineer's main guide in building design, supplementing, and at the same time nourishing, his creative intuition. It has a long history, though, in its present form, it is still comparatively young. One of the Station's engineers, in a short series of Papers⁽²⁾, has traced some of this history, with the intention of showing something of the roles that different types of theory can play in design. In the past, theory was directly concerned with the forms that embodied a structure, so that its role was a very direct one. Today, it is concerned more with abstractions such as forces and stresses and strains that are independent of any particular form, so that its role must always be a less direct one. It is also, now, a more varied role. The use made of modern theory by a Maillart, a Nervi or a Torroja is very different from the use made of it by a designer who details a structure solely in accordance with the relevant Codes of Practice.

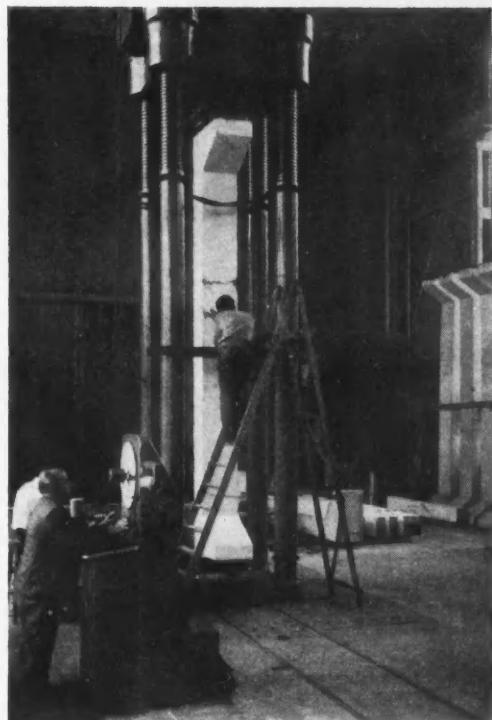
Structural research at the Building Research Station is aimed partly at extending the general body of structural theory and partly at codifying this general body of theory into Codes of Practice and similar Standards. Some programmes are undertaken specifically to help in the redrafting of a particular Code. A recent example has been a series of tests⁽³⁾ designed to check one of the revisions in the latest issue of B.S.449, "The Use of Structural Steel in Building." This relates to the load-carrying capacity of concrete-encased steel stanchions subjected to axial and eccentric loading.

In the 1948 edition of the Standard, the only structural benefit the designer could derive from such encasement was a reduction in the assumed slenderness ratio of the stanchion due to the stiffening effect of the concrete. It has been shown that such stanchions can in fact be safely treated as composite sections in which a proportion of the direct load is carried by the concrete, acting at a stress of 1/30 of that in the steel. In the latest version of the Standard, design on this basis is allowed with the proviso that the working load shall not exceed twice that of the corresponding bare steel stanchion. This can result in savings of up to 30 per cent. in the weight of steel section required.

Reinforced Concrete

Recent work on reinforced concrete has been concentrated on lightweight aggre-

gates and on shear. An increase in the production of reliable lightweight aggregates in this country has prompted an extensive investigation into their use in reinforced concrete. The first results of this work have now been summarised⁽⁴⁾.



A test on an eccentrically loaded encased steel column. Other specimens are seen on the right.

They do not yet permit an exact prediction of the degree of protection against corrosion afforded by lightweight concretes, but they do suggest that corrosion is influenced more by the thickness of the cover provided and the quality of the con-

crete than by the nature of the aggregate.

Comparative tests, using normal and lightweight aggregates, on reinforced concrete beams designed to fail by a breakdown of the bond between the concrete and round mild-steel bars, show that the bond strength developed by lightweight concretes is less than that developed by a dense concrete of the same crushing strength. The bond stresses permitted by CP.114 should therefore be reduced.

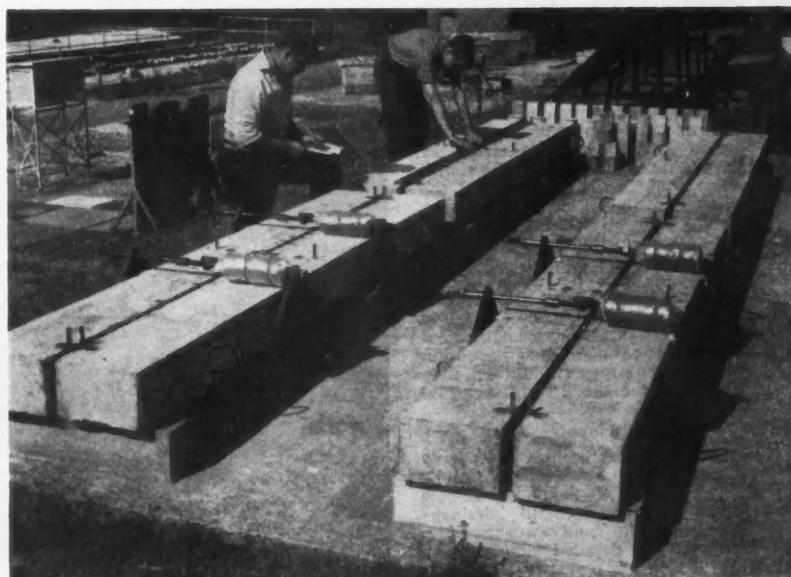
The influence of shear on the strength of normal reinforced concrete beams is much more complex than present Codes of Practice imply. There are so many interacting variables that a comprehensive and practical method of design for shear is not easily arrived at and the relevant recommendations of the current Code do not appear to be adequate.

A contribution⁽⁵⁾ to the discussion on a recent American Paper, includes a summary of work at the Building Research Station on shear strength under repeated loading. For practical purposes a beam may be considered to have failed in shear when a main diagonal crack has developed, although the load at which this occurs may be less than the maximum load which the beam could sustain. Using this criterion of failure, if a pulsating load is superimposed upon a static load representing the design dead load, the highest value which can be applied for 1,000,000 cycles without such cracking is only about 70 per cent. of that sustained in static tests.

Another note⁽⁶⁾ describes a static loading test on a specially prepared beam in which a thin former was used during casting to produce two smooth-sided cracks similar in extent and position to the flexural cracks observed in other beams just before the onset of the main diagonal crack. The low failing load compared with that of a normal beam suggests that the forces developed by the interlocking of the aggregate along flexural cracks play an important part in determining the load at which the diagonal crack that will ultimately cause failure is likely to appear.

Wind Loading

Wind loading on buildings can present many different problems. A recently issued Digest⁽⁷⁾ explains how the result of meteorological observations have been



Tests to compare the long-term outdoor behaviour of similar reinforced concrete beams cast with different aggregates, three lightweight and one normal. Each of the nearer beams has been loaded initially until it cracked and then kept under load

interpreted in the design recommendations given in CP.3, Chapter V. This Digest also discusses the results of recent wind-tunnel tests on models of rectangular buildings with mono-pitched roofs with little slope, which show that with this form of construction the most severe conditions are likely to occur when the wind blows obliquely to the faces of the building. A more reliable method of estimating the wind forces on flat and shallow pitched roofs is proposed, to be used in conjunction with a load factor of three against uplift and overturning.

One Paper⁽⁸⁾ comes from the Soil Mechanics Division of the Station. It gives details of the mechanical and physical properties of London Clay at depths between 50ft. and 160ft. These have been determined from samples taken at the working face during tunnelling operations at a number of sites, and also by a study of the appearance of the working faces as mining proceeded.

The importance of this type of investigation to supplement the findings of borehole exploration is twofold. Firstly, visual observation at the tunnel face can throw light on structural characteristics of the formation that are not revealed by normal boring methods. Secondly, the opportunity can be taken to obtain relatively large samples for laboratory tests with the minimum risk of disturbance. Tests on specimens prepared in this way expose some shortcomings of the use of bored samples for the determination of physical characteristics, and indicate that the clay is stronger and less compressible than these samples suggest.

A new series of Papers under the general title "Factory Building Studies" will deal with many aspects of design. In the first⁽⁹⁾, the particular case of the multi-storey factory is discussed, and the wide range of considerations that can influence both its main conception and the finer points of detail is outlined. Multi-storey construction may sometimes offer immediate economic advantages in terms of factory organisation and initial cost, but its long-term efficiency depends largely upon the extent to which changes in functional requirements can be predicted and accommodated. An adequate appraisal of the effects of possible changes in manufacturing techniques is therefore a pre-requisite of a satisfactory design.

The fourth study of this series⁽¹⁰⁾ deals with design loads. Self-weights of the structure and its cladding should be simple to estimate, but this is not true of the superimposed loading. This loading may arise from so many different sources, temporary or permanent, that it is difficult to assess it with the accuracy that is desirable for economic design. To assist in this assessment, data have been compiled on the loads imposed by many types of machine, ancillary plant, service equipment and fittings. The importance of anticipating future requirements, rather than designing solely for the present, is again stressed.

Water Supply

Research on public water supply and drainage is proceeding along several lines. The high incidence of failures in underground drainage pipelines not due to faulty workmanship has prompted a detailed investigation into their design and construction. This has involved numerous laboratory tests using both ceramic and concrete pipes, and also a study of a large number of failures that have occurred in practice.

The investigation is described in two Papers^{(11), (12)} and in two Digests⁽¹³⁾. These recommend laying procedures which, in some cases, depart markedly from current practice. With both concrete and ceramic pipes the difficulties of making the pipeline sufficiently strong to withstand the many combinations of loading that may be imposed on it are increased if rigid joints

of damage reduced by testing and backfilling immediately after completion of each section.

The laboratory tests have shown little justification for the practice of providing in-situ concrete surrounds for large-diameter concrete pipes. Under normal site conditions, the benefits are likely to be small in relation to the cost, and pipes that are sufficiently strong in themselves are to be preferred. Such pipes are now available in this country.

Recent developments relating to domestic plumbing and sanitation are considered⁽¹⁴⁾ in contributions to a symposium convened by the Royal Society of Health. The consumption of water has increased so much in recent years that wastage by the consumer has become a much more serious matter. It can arise either from defects developed in an appliance or through the use of an appliance that is inherently wasteful. To reduce such waste, attempts are being made to improve the design of fittings.

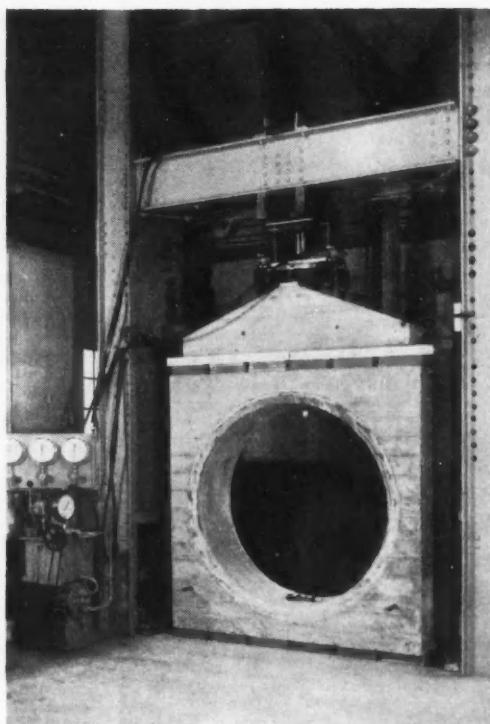
In the design of above-ground drainage systems, the application of scientific principles has already led to considerable economies, and attention has recently been focused on the possibility of extending the now familiar "single-stack plumbing" system for two-storey houses to high flats and public buildings. Recommendations are given in a Station Digest⁽¹⁵⁾. Numerous other Papers deal with construction and costs.

Mechanical Equipment

The use of mechanical equipment on the building site is growing rapidly. Most noticeable are the cranes, now available in a wide range that is described in another Digest⁽¹⁶⁾. Other Papers dealing with equipment look more closely at one type of crane—a Continental climbing crane designed for use on buildings of eight or more storeys⁽¹⁷⁾—and describe smaller pieces of equipment developed at the Building Research Station for use in the lifting and placing of concrete and mortar^{(18), (19)} and in the loading of packed bricks on to a lorry^{(20), (21)}.

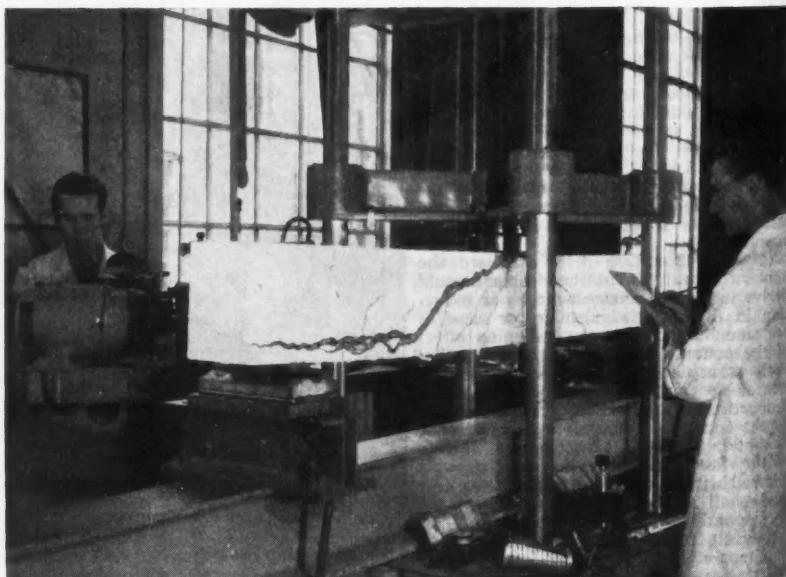
General questions of administration, site organisation and cost control are considered in three Papers. One is particularly concerned with cost control⁽²²⁾ and the others with the increasing dependence of productivity on efficient site organisation and office administration^{(23), (24)} as more mechanical plant is introduced. The latter present the results of an extensive survey of the existing operational structures of the industry both in this country and on the Continent.

(Concluded on page 434)



Loading a section of 60in. concrete pipe with a 6in. site concrete surround

are used. By the use of rubber flexible telescopic joints, some displacement of line of one pipe relative to the next, such as may result from local earth movements, can be safely accommodated, and the risk of failure due to thermal and moisture movements is reduced. For these joints to be effective, any concrete bed beneath the pipes must be discontinuous where the joints occur. A further advantage of their use is that time can be saved and the risk



A shear failure, under static load, of a simply-supported reinforced concrete beam

SYDENHAM BY-PASS, NORTHERN IRELAND

Main Approach Road to Belfast

THE Sydenham By-pass, which will form the main approach road to Belfast from the residential areas of Holywood and Bangor, is 2½ miles long and runs from just outside the city's boundary almost into the centre of Belfast. It has dual carriageways, each 22ft. wide, two 9ft. wide cycle tracks and two footpaths, 6ft. wide. The central reservation is 5ft. wide along the major part of the by-pass, because of the restricted width of land available.

Four major bridges have been needed on the project. The largest of these is the Ballymacarrett viaduct, which carries the by-pass at a skew over a railway yard at the Ballymacarrett Junction. The bridge is 710ft. long and has 10 spans, eight of 74ft. and two of 54ft. The deck is 84ft. wide.

Prestressed Beams

The 74ft. spans are formed of "I" section precast prestressed concrete beams. The beams, which were cast on the site, were stressed on the Magnel-Blaton system, and were then placed side by side and transversely stressed on the Lee-McCall system; the joints between were grouted.

Apart from several special beams, the 54ft. spans are formed of hollow box-section prestressed concrete beams. These were factory produced on the long line pre-tensioned system and were again laid side by side and transversely stressed on the Lee-McCall system.

The bridge piers are mainly of mass concrete, and are carried on 440 piles, varying in length from 30ft. to 45ft. About half the piles are of precast reinforced concrete and the remainder are of in-situ reinforced concrete. Each pile is designed to carry a load of 50 tons.

The Dee Street bridge has been built to carry a minor road over the by-pass and over a two-track railway. The section over the new road is a twin-arch portal-framed structure of reinforced concrete; over the railway track, precast prestressed concrete beams were used.

An existing bridge has had to be widened to carry the by-pass over the Connswater river. The continuous slab bridge has a

total length of 150ft., consisting of two spans of 25ft., two of 30ft. and one of 40ft., to match the spans of the existing bridge.

The Tillysburn bridge carries the new road over a two-track railway at a very acute angle. As the skew was so

is 8in. thick and is made up of two courses: the bottom course is 6in. thick and the top course 2in. thick. Mild steel reinforcement was laid between the two courses. Expansion joints were sawn at 30ft. intervals, and were provided with dowels. A longitudinal joint with tie bars



Sydenham By-pass

so great, it was decided to span the railway on the square, giving a bridge 200ft. wide and with a 33ft. span. The bridge deck is of factory-made prestressed concrete beams, of inverted "T" section, produced on the long line system. The spaces between the beams are filled with in-situ concrete.

The by-pass itself is of reinforced concrete for one mile of its length. The slab

was constructed along the centre line of each carriageway.

The remaining 1½ miles of the by-pass will be surfaced with asphalt laid on two courses of vibrated stone, each course being laid in two 4½in. layers. The top course of vibrated stone was blended with crusher dust. A 3in. layer of bituminous macadam was then put down and surface dressed. Two courses of asphalt will be laid within a year of the opening of the road to traffic.

Engineers and Contractors

The by-pass has been designed by the Roads and Bridges Department of the Ministry of Commerce (present chief engineer, G. F. Chambers, B.Sc., A.M.I.C.E., A.M.I.Mun.E.; the chief engineer at the design and planning stage of road and during construction of all the bridges was R. D. Duncan, O.B.E., B.Sc., M.I.C.E.).

Contractors are as follows: Ballymacarrett Viaduct and Dee Street Bridge—Farrans, Ltd.; Tillysburn Bridge and Connswater Bridge—Concrete Piling, Ltd.; carriageways—John Graham (Dromore), Ltd.

£400,000 PRESTRESSED PIPE CONTRACT

A contract for the supply of prestressed concrete pressure pipes and spun-iron pipes worth approximately £400,000 has been placed by Cardiff City Council with The Stanton Ironworks Co., Ltd., near Nottingham.

The pipes are to be used in connection with the Llandegfedd Water Supply Scheme which is intended to augment supplies of water to the Cardiff and Newport areas.

The contract for the laying and installation of the pipes and specials has been awarded to J. L. Kier and Co., Ltd., London.



Ballymacarrett Viaduct

EVOLUTION OF NUCLEAR PLANT DESIGN

Future Reactors to Give Cheaper Power

THE development of nuclear power was outlined by Sir Christopher Hinton, chairman of the Central Electricity Generating Board, during a lecture given at the Royal Society's Tercentenary Celebrations in London last week.

The foundations of the atomic energy industry were paid for with defence funds, he said. This applied even to the Calder Hall reactors which were built primarily for plutonium production and generated electric power as a by-product. However, little further research and development in the industrial field could now be charged to a defence budget.

Three important changes had taken place since the British nuclear programme was launched in 1955. The cost of conventional power had fallen by more than 10 per cent.; the credit for plutonium (a by-product of commercial reactors) had been drastically reduced, and interest rates had risen. As a result of these changes, nuclear power from the plants now being ordered would cost about 25 per cent. more than from the best conventional plants built concurrently and operated under similar load conditions.

Nuclear Stations Justified

The plans of nuclear power had also been affected by the change in short- and long-term forecasts of coal supplies, and the programme was last revised in June, 1960. Nevertheless, a programme involving the construction of many successive nuclear power stations, each of which would be less economical than conventional stations, was still justified in view of the promise that nuclear reactors would give cheaper power than could be obtained from conventional fuels at a reasonable date in the future.

Nuclear power would be made cheaper by using higher temperatures in the heat cycle. But advances in technology, bringing down the cost of power were still taking place in the conventional field.

Turning to capital costs of conventional plant, Sir Christopher pointed out that from the earliest days of the steam engine there had been a continuous fall in the cost per unit of output. Looking to the future, other factors had to be taken into account such as the transport of large generating units to site and the stiffness of interconnection of the electricity Grid system. It was also necessary to forecast the cost of fuel, and this was far more uncertain than forecasting capital cost and thermal efficiencies, either in the conventional or the nuclear power plant fields.

If, with atomic power, we could achieve the same top temperatures in the heat cycle that were used in conventional power stations, nuclear power could today be cheaper than conventional power. The lower temperature of nuclear plants was entirely due to problems within the reactor. Primary problems involved the material used for canning the fuel elements, the fuel itself, and the behaviour of the graphite moderator under heat and irradiation.

Secondary Problems

Secondary problems were those of reactor stability and control which became more acute when higher ratings and burn-ups were used. With the low burn-ups used at Windscale, the reactors had a negative temperature coefficient and were self-regulating. At higher burn-ups the build-up of plutonium reversed that part of the temperature coefficient which was associated with the graphite. The overall effect was that control should be by movement of the control rods, and care should be taken to see that departure from normality could not be too rapid to be corrected with absolute certainty.

Xenon poisoning also became more acute

at higher ratings and could make it difficult to restart the reactor after a shut-down. It was fortunate that the fuel element temperature coefficient remained negative and was strong enough to give an effective stabilising influence on rapid transients.

Engineering Construction

Sir Christopher also dealt with problems of engineering construction which were mainly connected with the pressure system. These problems—of fabrication, brittle fracture, welding and design—were reduced by the use of higher fuel element ratings because the dimensions of the pressure vessel for a given heat output were reduced.

The advanced graphite reactor was designed to achieve a bulk gas outlet temperature of 510 degrees C although the gas flow was so arranged that the pressure shell was exposed only to gas at 320 degrees C which had passed through the heat exchangers. Either beryllium or stainless steel could be used for canning the uranium oxide fuel. Capital cost of the first industrial reactors of the A.G.R. type were estimated at between £95 and £80 per kilowatt (sent out) and they would generate power at a cost of between 0.55d. and 0.50d. per unit or perhaps a little less at a load factor of 75 per cent.

The downward trend in cost of the nuclear power plants being built by the C.E.G.B. could be closely estimated.

Station	Capacity (MW s.o.)	Cost (£/kW s.o.)
Berkeley	275	160
Bradwell	300	159
Hinkley Point	500	133
Trawsfynydd	500	123
Dungeness	550	110

From the general picture, three distinct lines of advance could be seen. These were firstly an increase of pressure in the gas circuit, secondly improved utilisation of pressure vessel volume, and thirdly increase in fuel element and coolant temperature.

It was probable that there would be a period during which the two types of reactors, A.G.R. and Calder, would overlap, and orders for A.G.R. stations would be interspersed between orders for Calder type stations until ultimately the more technically advanced A.G.R. showed a clear operating cost advantage over the older type.

Research and Development

"It is disquieting, however, to compare the research and development effort which is devoted to bringing down costs in the two fields" (of conventional and nuclear power), continued Sir Christopher. In analysing these costs, he stated that in the conventional field, research and development costs were of the order of 5 per cent. of the capital value of power plants built. Information was not available to determine the corresponding figure in the nuclear field, but assuming that the cost of the nuclear sections of the power plants to be built for the Central Electricity Generating Board in the years 1965-1975 was rather less than £50m. per year, it seemed improbable that research and development costs, if effort were maintained at its present level, would be likely to be less than 30 per cent.

It was probable that by the time the A.G.R. went into use, research and development expenditure on the development of the Windscale prototype would have been of the order of £30m. Yet it was possible that the number of power stations built by the Generating Board using this type of reactor would be less than 10.

By the mid-1970's, advances to higher temperatures and higher ratings were likely to make the introduction of another thermal reactor necessary. The High Temperature Gas-cooled Reactor was an effort to meet the problem by using the graphite as a canning material for the fuel and thus replacing it as the fuel elements were changed. Using enriched uranium in ceramic form in a semi-homogeneous system, this reactor, should, if successful, make it possible to achieve a temperature of over 1,000 degrees C in the heat cycle.

The Alternative

If such a system using a replaceable graphite moderator could not be evolved, the alternative would be to use heavy water as a moderator so that radiation damage could be repaired or removed during circulation. It would then probably be convenient to use steam instead of CO₂ as a coolant.

Reverting to research costs, in the nuclear field, Sir Christopher asked how long could the electricity industry justify costs of about 30 per cent. of capital expenditure.

Remembering that the demand for electricity has a doubling period of 10 years, that the total fuel requirements of the Generating Board (expressed as coal equivalent) are now 54,000,000 tons per year and will rise to 90,000,000 tons per year by 1970, and remembering that it is improbable that sufficient British mined coal would be available to meet the Board's total fuel requirement by some date in the 1970's, it appears reasonable to aim at continuing the high rate of advance of nuclear technology to the point where nuclear power breaks even in cost with conventional power; we shall then have room to manoeuvre in a three fuel economy. After that date, which is not remote, it is surely reasonable to think that research on reactor technology should be justified by savings which can be expected to arise from its industrial application."

Sir Christopher concluded by referring to the effect of the injection of defence technology into industrial practice. "One wonders," he said, "whether the injection of these developments into the industrial field has not over-stimulated some industries in a way which makes it hard to live with them while diverting effort from others."

WORK BEGUN ON 19-STORY STEPNEY FLATS

Work has started on the erection of a 19-storey block of flats near the junction of Hanbury Street and Old Montague Street, Stepney. Although still taller blocks are planned, it is the highest yet under construction by the L.C.C.

This 180ft. block will contain 73 flats. Electric floor heating, two high-speed lifts and internal mechanically ventilated bathrooms and W.C.s are to be installed. The windows of living rooms above the 11th storey will be double-glazed to improve insulation. Tenants' stores, a transformer chamber, water storage and booster pumps will be housed in the semi-basement.

The block forms part of a £232,553 contract awarded to Rush and Tompkins, Ltd., Sidcup, for the first phase of development of the 5.54 acre area bounded by Hanbury Street, Old Montague Street and Greatorex Street, Stepney. Eventually the L.C.C. plans to provide 210 dwellings on this site—73 flats in the high block, three terraces of two-storey houses and a two-storey block of old people's dwellings, and 92 flats and maisonettes in a six-storey block to the west. Beside dwellings, 27 garages, parking space for 24 cars, a toddlers' play area and other amenities are to be provided.

The present stage of building will include the erection of the 19-storey block, the two-storey block of flats, 37 tenants' stores, seven garages, parking space for nine cars and the toddlers' play space.

July 28 1960

THE CONTRACT JOURNAL

i c

ALLIS-CHALMERS

commence

manufacture

in

Great Britain

II & THE CONTRACT JOURNAL 28/7/60

ALLIS-CHALM



WIMERS BTL 14D Tractor Shovel

NOW MANUFACTURED IN GREAT BRITAIN

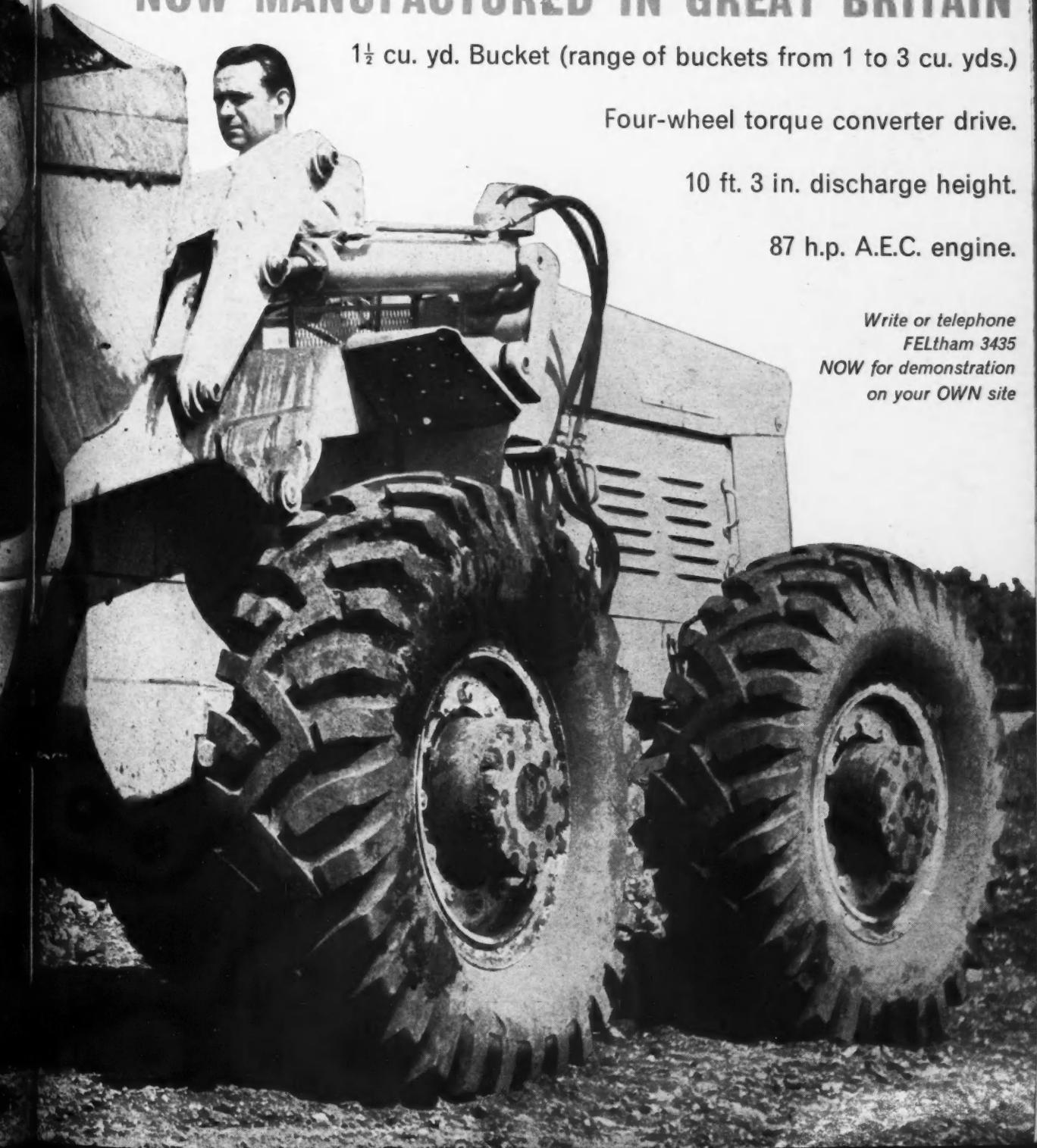
1½ cu. yd. Bucket (range of buckets from 1 to 3 cu. yds.)

Four-wheel torque converter drive.

10 ft. 3 in. discharge height.

87 h.p. A.E.C. engine.

*Write or telephone
FELtham 3435
NOW for demonstration
on your OWN site*



ALLIS-CHALMERS

FIRST!

with the torque-converter on tracks

FIRST!

**with the torque-converter on
four-wheel drive**

FIRST!

with the hydraulic tracto-shovel

FIRST!

**with long-life roller lubrication on
every machine**

FIRST!

with unit construction

Write or telephone FELtham 3435 NOW for demonstration on your OWN site.

MACKAY

of Feltham

MACKAY INDUSTRIAL EQUIPMENT LTD., CENTRAL WAY, FELTHAM, MIDDLESEX. (FELTHAM 3435/0)

WORK OF NORTHERN IRELAND HOUSING TRUST

Current and Future Building

DURING the year ended March 31, 1960, 927 dwellings were completed by the Northern Ireland Housing Trust, states the 15th annual report of the Trust. On March 31, the total number built was 21,567 and 3,038 were under contract. In addition land was in the possession of the Trust for a further 4,250 dwellings.

The capital cost of houses built by the Trust is met by loans which run for 60 years and the rents are very largely determined by the rate of interest charged on these loans and by the amount of the yearly subsidy paid by the Government. If the rate of interest is raised by one per cent, and if the subsidy remains unchanged then the computed rent on the average house is thereby increased by five shillings per week for 60 years. In 1957, under the Government's monetary policy, the rate of interest on long-term loans was fixed at the unprecedented height of 6½ per cent, and the Trust felt compelled to curtail its building programme drastically.

In 1958 an extra subsidy was given by the Northern Ireland Government to help to meet the exceptionally high interest rate and in the year 1958/59 fresh contracts for 2,351 dwellings were placed. This extra subsidy was reduced in 1959 and ceased on January 1, 1960, interest rates having somewhat fallen. The current interest rate is 5% per cent.

This is a high rate to pay for 60 years, continues the report. It means that flats and houses being built at present are, in most instances, let at rents below current costs but, under the Trust's rent policy, all housing costs are being covered by the aggregate of rents received from all Trust houses together with the annual housing subsidy. Recent tenders show that prices are rising and are now higher than in 1958.

There is a considerable lapse of time before a reduction in the number of contracts placed is reflected in the figure of houses completed. Only 927 dwellings were completed in the year 1959/60, this being the result of the small number of new contracts placed in 1957. The small number of houses completed in 1959/60 also reflects a rate of building slower than in most previous years in spite of excellent weather. The slower rate of building was caused by the scarcity of some types of skilled workers, notably joiners, and by other demands on the building trade. This scarcity is continuing and may affect the Trust's ability to step up the rate of building in the immediate future.

Current and Future Building

The following details of current and future building by the Trust are given in the report.

Belfast Area. Two-thirds of the houses built during the year were around Belfast: at Rathcoole, Rushpark and Greenisland on the northern side of the city, at Seymour Hill, Dunmurry on the southern side, and on the east at Braniel and at Redburn, Holywood. By the end of the year 9,268 houses had been completed in the area and a further 2,026 were under contract, making a total of 11,294 dwellings.

As building spreads beyond the city boundary there comes a point when it is no longer feasible to extend the original water and sewerage facilities and other services, so that entirely new works become necessary. As these take years to plan and construct, sites for large-scale development must be decided upon long in advance. Although in the past the Trust sometimes encountered serious difficulties in securing these services it was usually possible to arrange for their provision in time to avoid the start of new building being unduly delayed.

The Trust hopes in the coming year to

place further contracts at Andersonstown, Belvoir Park, Dunmurry, Greenisland, Rathcoole and Suffolk on land already in its possession. The acquisition of more land, particularly on the east side of Belfast where the large Braniel estate will soon be completed, becomes urgently necessary if the building programme is to be sustained in future years, and proposals have been made to secure additional extensive sites.

In the selection of new sites the Trust finds itself confronted by the difficult and important problems raised by the expansion of the built-up area around Belfast. Since 1943 these problems have been discussed in various reports submitted to the Government. Just recently the Government invited Professor Robert H. Matthew, C.B.E., F.R.I.B.A., to advise on the future planning of the area. The Trust understands that Professor Matthew has been asked to make an interim report and, when this is received, it is hoped that the Government and the planning authorities concerned will find it possible to decide quickly where development will be allowed to take place.

Londonderry City. Building has continued under two contracts at Foyle Hill, an extension of the large Creggan estate, and at Belmont, outside the County Borough boundary.

Recently the Trust agreed to investigate the possibility of redeveloping a very large area in the centre of the city consisting mostly of unfit houses.

Ballyclare. A contract has been let recently for 61 dwellings. This will carry a stage further the development of the site on which 163 houses have already been built.

Ballymena. Two estates have already been built and it is proposed to develop a third. A site has been selected on the south side of the Braid River opposite the Adair estate. As part of this development, it is proposed to construct a new road which will give direct and improved access from the Larne Road to the centre of the town.

Banbridge. Land alongside the Glencar estate was purchased in 1954 but building was deferred. On this site 10 bungalows for old people are at present being built for the Trustees of the late Mary Adams, a native of Banbridge who died in New Zealand, leaving a fund for the purpose. In addition work is about to start on 108 houses for the Trust.

Coleraine. At the Laurel Hill estate 136 houses had been completed by the end of the year and a further 106 dwellings were being built. This is the Trust's third estate in Coleraine, and it was embarked on to enable Chemstrand, Ltd., to recruit skilled staff from outside the locality for this important new industry. The first 80 dwellings are occupied by employees of the firm. The Company is now extending and further houses will be needed to meet its requirements.

Downpatrick. It is proposed to invite tenders in the near future for 40 dwellings on land at Kary Hill just outside the urban boundary.

Enniskillen. The building of the 56 dwellings which are being added to the existing estate has proceeded at a disappointingly slow rate, but the first of these should soon be handed over.

Galgorm. A site was bought in 1952 but its development had to be deferred pending the provision of water and sewerage by the Rural District Council. Work has begun on 67 houses.

Larne. Previous annual reports have dealt at some length with the need for houses following new industrial development in the town. The Trust's estate of over 1,000 houses on the Cairncastle Road is almost complete. The estate is some

distance from the centre of the town, and is approached by a steep hill. Many of the tenants are from other parts of Northern Ireland or from England and there has been an exceptionally large number of changes in tenancy. In these circumstances a feeling of being a community has been slow to develop. A primary school on the estate is almost ready for use and recently the Trust has made accommodation available for social activities, and further shops have been completed. With these facilities it is hoped that the estate will now feel itself more of a community as well as part of the enlarged borough.

Lisburn. Four estates have been built in Lisburn since 1945, and the purchase of a further site at Roseville has been almost completed, on which it is hoped to start building in the autumn. This site, which will complete the post-war development by the Council and the Trust of the east side of Lisburn up to the River Lagan, will accommodate 150 dwellings.

With the spread of building from Belfast, Lisburn may now be regarded as in the outer Belfast area and, although the Trust and the council have built a large number of houses, the pressure continues. The Trust has therefore decided to acquire further land and has recently obtained planning approval for a sixth site and negotiations for its purchase are about to be opened. The site proposed is of about 100 acres on the south side of the town between the Moira and Ballinderry roads and its development will provide a steady flow of houses for some years ahead.

Lurgan. The construction of the 48 houses being added to the existing estate is well advanced and the Trust is in the process of selecting another site for a substantial number of houses.

Newcastle. The Trust is at present negotiating for a site for 50 houses.

Portadown. In 1955, when the Redmanville estate was built, a portion of land was left undeveloped as sewerage could not be provided at the time. This is now available and the Trust and the Borough Council have recently agreed, in broad outline, on a layout plan for about 400 dwellings on the land already owned by the Trust and on land owned by the Council which the Trust will take over. This development will necessitate the eventual removal of 27 unfit houses in Charles Street.

Omagh. Here the Trust is building for the council on three sites already developed by the council and the first houses have recently been handed over. The total number of houses being built on the three sites is 100.

Seapark. A small scheme of 30 houses is almost complete. The Trust and the rural district council propose to consider in the immediate future the question of redeveloping land adjacent to the site, which contains a large number of unfit houses.

Whitehead. Tenders for 64 houses will be invited during the coming summer.

Redevelopment Schemes

Armagh. Work has commenced on the redevelopment of Callan Street. In the initial phase 40 new houses are being built, some on vacant ground and the remainder on the site of unfit houses which will be demolished. Eventually 36 houses will have been demolished and 60 new dwellings built.

Cookstown. The scheme of 61 dwellings was completed in April 1960. Altogether 59 dwellings were pulled down and the tenants, together with some applicants on the general housing list, were housed on the same site.

(Concluded on page 439)

In Parliament

THE PROBLEM OF LAND SCARCITIES

Minister Outlines Government Policy

THE common sense remedy for high prices was to encourage more land to come on the market, and that was exactly the course the Government were pursuing, stated Mr. Henry Brooke, Minister of Housing and Local Government, during a debate in the Commons last week.

There was no truth whatever in any allegation that the total amount of land allocated for building throughout the country was inadequate, he said. There was no need for some form of central independent inquiry into future housing and building needs. The problem was essentially a local one and not a national one. In most parts outside the tentacles of big prosperous cities and places along the coasts which were particularly attractive for building there had been no unusual rise in land values.

On the subject of green belts, the Minister said that the Government were not going to let them go. He advised people who were still trying to detect loopholes or weaknesses in what he had said about green-belt policy to give up their faithlessness, because green belts were going to stay.

There was no doubt that the existence of a green belt tended to raise prices on either side, particularly on the inner or urban side. There was also no doubt that if a city like London, encircled by a green belt, remained prosperous, the time might come when no open land was left for building in urban land areas. They had to allow for all the land that was demanded by new and modern roads, so it was necessary to look not only at land on the urban side but also at land beyond the green belt.

There was no intention of repeating the urban sprawl on the other side. Any development there would be under close planning control.

Generally speaking it was not true that values beyond the green belt were rising because not enough land there had been allocated to housing, thereby producing an artificial scarcity. Values had been rising because land there which had not been interesting to builders until lately was now becoming interesting.

Beyond the green belt open country might stretch for miles. That was not to

say that to bring down prices anyone should be allowed to build in it wherever he liked.

At present only about 10 per cent of the whole land surface of England and Wales was built up and used for roads and railways and the like. But the increase in population, as well as the insatiable demands of the modern world, meant that before the end of the 20th century that 10 per cent. might be 12 per cent. or more.

The crux of the whole problem was to make sure that artificial land scarcities did not arise. There was no avoiding natural land scarcity when an area was fully developed. What the Government was doing, therefore, was to make sure that not only sufficient land was allocated for building beyond the green belt, but also to encourage the fullest use of land within the suburban areas on the inner side of the green belt. The responsibility for this lay in the first place with the planning authority.

The 1947 Act, it was true, was based on counties and county boroughs as the planning areas, but these matters needed to be looked at on a regional as well as a county basis. That was what his Ministry planned to do. On top of their discussions with individual planning authorities they were adopting a policy of regional conferences of central and local government officers.

Mr. Brooke added that his aim in the next year was to settle definitely how each of the large overspill needs was to be met. He would not rule out the idea of development corporation machinery, and he did not rule out the idea of other new towns, though the search the London County Council had made recently showed how hard it was to find any fresh site that was suitable for a completely new town as distinct from the expansion of existing towns.

Sewage Disposal

When the Minister was asked by Mr. Awbery if he would have an enquiry made to ascertain the best method for treating sewage before disposing of it into the sea, the Parliamentary Secretary, Sir Keith Joseph, replied that Mr. Brooke did not think expert medical opinion was divided

(Concluded from page 430)

In reducing costs, continued attention to details is also necessary. Recent surveys^{(25), (26)} show that, although cement may be saved by using properly designed concrete mixes, since such mixes are leaner and drier, the saving will probably be more than offset by the extra time and labour spent in supervising, placing and compacting. Overall economy is more likely to be achieved by the use of a concrete with a slump between 2in. and 4in. where vibration is used, or between 3in. and 6in. where hand compacted, with low-slab concrete used only where necessary to ensure a high durability.

References

- (1) Lea, F. M. Research on building. National Provincial Bank Review, 1959 (46), May, 9-15.
- (2) Mainstone, R. J. Structural theory and design. "Architecture and Building," 1959, 34 (3), (5), (6).
- (3) Stevens, R. F. Encased steel stanchions and B.S. 449. "Engineering," 1959, 188 (4879), October 23.
- (4) Short, A. The use of lightweight concrete for reinforced concrete construction. "Reinforced Concrete Review," 1959, V. (3).
- (5) Taylor, R. Fatigue behaviour of reinforced concrete beams—Contribution to discussion of a Paper by Tien S. Chang and Clyde E. Kesler. American Concrete Institute Journal, 1959, 30 (9), March.
- (6) Building Research Station. Digest No. 122. Wind effects on roofs.
- (7) Ward, W. H., Samuels, S. G., Butler, M. E.
- (8) Further studies of the properties of London clay. Geotechnique, 1959, 9 (2), June.
- (9) Allen, W. A. Modern multi-storey factories—a discussion of their design. Factory Building Studies No. 1, London, 1959. H.M.S.O.
- (10) Allen, H. V. Structural loading in factories. Factory Building Studies No. 4, London, 1959. H.M.S.O.
- (11) Clarke, N. W. B. The causes and prevention of fracture in salt-glazed ware and other ceramic pipelines. The Public Works and Municipal Services Congress, November 11, 1958.
- (12) Clarke, N. W. B. Some structural aspects of thin-walled concrete pipelines. Proc. Institution Civil Engineers, 1959, 14, September.
- (13) Building Research Station. Digest Nos. 124 and 125. Small underground drains and sewers.
- (14) Clarke, N. W. B., Sobolev, A., Griffiths, T. J. Symposium on new trends in plumbing and sanitation. Royal Society of Health Journal, 1959, 79 (1), Jan.-Feb.
- (15) Building Research Station. Digest No. 127. Simplified plumbing for multi-storey flats.
- (16) Building Research Station. Digest No. 129. Cranes for building.
- (17) Vallings, H. G. Trials with a climbing crane. "The Contract Journal," 1959, February 19.
- (18) Vallings, H. G. A concrete skip with a rubber body. "The Contract Journal," 1959, March 5.
- (19) Vallings, H. G. Direct placing of ready mixed concrete. "The Contract Journal," 1959 (4176), July 9.
- (20) Vallings, H. G. Loading packed bricks for transport. "Claycraft," 1959, 3, April.
- (21) Vallings, H. G. A conveyor lamp for lifting loads carried on hand barrows or trucks. "Mechanical Handling," 1959, October.
- (22) Reiners, W. J. Research, cost planning and cost control. "National Builder," 1959, 38 (9), April.
- (23) Sansom, R. C. The organisation of building work. "The Builder," 1959, 197 (6077-6083).
- (24) Sansom, R. C. Organisation of building sites. National Building Studies Special Report No. 29, London, 1959. H.M.S.O.
- (25) Forbes, W. S. Production aspects of mix design for concrete in building work. "The Contract Journal," 1958, November 13.

on the best methods of disposal, whether to the sea or otherwise. He therefore saw no need for an enquiry. It was up to the local authorities to make use of proved methods to remedy any defects in their existing systems.

Slum Clearance

Mr. Brooke informed Mr. Spriggs that about 650,000 houses remained to be cleared under the present slum clearance programmes of local authorities. The number of dwellings required to rehouse the occupants would probably be rather larger. He could make no estimate of the number of houses which local authorities might find it necessary to provide for general needs. But a substantial part of those needs could be met progressively from vacancies arising among the 3,250,000 houses which local authorities already owned.

Patent Office Building

Questioned by Mr. Skeffington about the projected work on the South Bank to rehouse the Patent Office and the National Scientific Library, the Minister of Works, Lord John Hope, said that the earliest date by which a building contract for this scheme could be let was 1963.

Hospital Extension

Replying to Mr. Noel-Baker, the Parliamentary Secretary to the Ministry of Health, Miss E. Pitt, stated that the Oxford Regional Hospital Board was about to start detailed planning on an extension to Kingshill Maternity Hospital, Swindon.

Darlington By-pass

Mr. Slater asked the Minister of Transport when it was expected to commence work on the Darlington By-pass.

In a written answer, the Joint Parliamentary Secretary, Mr. John Hay, said that it was now proposed to modify the scheme by extending the motorway southwards to include a by-pass of Barton. Construction would be put in hand as soon as the necessary preparatory work had been completed and funds were available.

Road Markings

Mr. Hay told Mr. Wingfield Digby that a yellow line marking on roads had been prescribed as an indication that loading and unloading were prohibited. In assessing visibility, it had been found that the texture of marking materials was more important than their colour. The Cats-eye reflectors widely used on roads in this country were considered to give the best definition of lines at night.

NUCLEAR STATION SITES IN ANGLESEY

Three suitable sites for nuclear power stations have been found by the Central Electricity Generating Board in Anglesey. They are Wylfa on the north coast of the island, Carmel at the north-west corner, and at Trefadog on the west coast.

The Board have considered these sites together with that at Edern on the north coast of the Llyn Peninsula and they have decided that when a second nuclear power station is required in North Wales they propose to seek permission to the development of the Wylfa site. Investigation of nuclear power station sites has now been pushed ahead of immediate requirements as part of the process of building up a longer term picture of generation possibilities.

BLEACHERS' ASSOCIATION TAKE OVER GEO. LONGDEN

The capital of George Longden and Son, Ltd., Sheffield, has been purchased for £1,080,860 by Bleachers' Association. Of this sum, £480,860 is in cash and the remaining £600,000 in Bleachers' Ordinary stock.

THREE-LEVEL SHOPPING PRECINCT IN £1½M. ELEPHANT AND CASTLE DEVELOPMENT

WHAT is claimed to be the largest covered shopping precinct in the world is to be built as part of a £1½m. private development proposal for the Elephant and Castle Redevelopment Area, Southwark, London, S.E.1.

The precinct will have three concourse levels, connected by ramps and escalators, and will extend along Newington Butts South side between the two roundabouts of the Elephant road redevelopment. Above it will rise a 170ft. high office block, probably steel framed and providing 87,900 sq. ft. of office space. There will be 201,900 sq. ft. of shopping space and in two basement levels will be parking space for 154 cars. Pedestrians and vehicles will be completely separated. All service traffic and loading bays are concealed underground.

The scheme, which is still subject to planning approval by Southwark B.C., has been prepared by Boissevain and Osmond, architects, 2 Field Court, Gray's Inn, London, W.C.1, on behalf of the Willett Group of Companies who will carry out the construction. It was selected by the L.C.C.'s Town Planning Committee from 36 proposals for development received after the 3½-acre site had been advertised as available on building lease.

From the 36 proposals a short list of five was chosen and the developers and architects were then invited to submit details amplifying their schemes and their financial offers.

The Town Planning Committee reported to the recent Council meeting that the general quality and architectural standard of the 36 schemes were very high. They stated that in selecting the five schemes for further consideration "we fully recognised that we were passing over preliminary offers which were financially more attractive (although it may well have been that one or two of them would have been considerably reduced if planning standards were fully complied with) but we considered that we must ensure at the Elephant and Castle buildings of the highest architectural quality."

Of the four other schemes short-listed, three were based on a shopping centre designed on two levels, with a sunken concourse, with offices planned as two or three separate blocks. The fourth scheme

showed a shopping centre based on a central square at pavement level, with the shops in two- or three-storey blocks and the offices all in one block.

Heated Arcade

The extensive shopping arcade of the successful scheme will be heated in winter and is covered by a great glass roof which can be slid back in the summer. It is

level, which connects the subway systems and gives on to a sunken pedestrian concourse in front of the building. Pedestrians approaching from the bus stops or other pavements need only travel half a flight up or down by easy ramps to reach either of the two main floors.

Internally the three floors are connected by escalators and staircases. The shop areas are capable of flexible subdivision



View of the proposed development from the London School of Printing site

laid out with planting and fountains, sculpture, pavement cafes and seats for shoppers.

The arcade is cruciform in plan; the main arm, 60ft. wide, runs the whole length of the site linking the two roundabouts, and the shorter arms give access to the bus stops and the main-line railway station. The floor of the main arcade is 9ft. above pavement level and under this is a lower arcade, 7ft. below pavement

and the plans suggest large departmental stores in the front part of the building with small shops at the back.

Consideration will also be given to a restricted use of illuminated signs on the top 8ft. of the office block. At 170ft. this building will be the same height as the London School of Printing and Graphic Arts which is to be erected nearby and for which the L.C.C. are now inviting tenders.



Artist's impression of the Willett Group scheme, showing the London School of Printing, right, and the Draper Street flats, right background

PRE-PLANNING CUTS COST OF TELEPHONE EXCHANGE BUILDING

New Ideas in Design

THE latest ideas on the layout and design of automatic telephone exchange buildings are demonstrated in the building which has just been completed at Altringham, Cheshire.

The outstanding features of the building are that the accommodation requirements of a 10,000-line automatic telephone exchange have been met in about 60 per cent. of the area and less than half the cost of a scheme planned and designed on previously accepted lines; but without sacrificing operational efficiency or architectural standards.

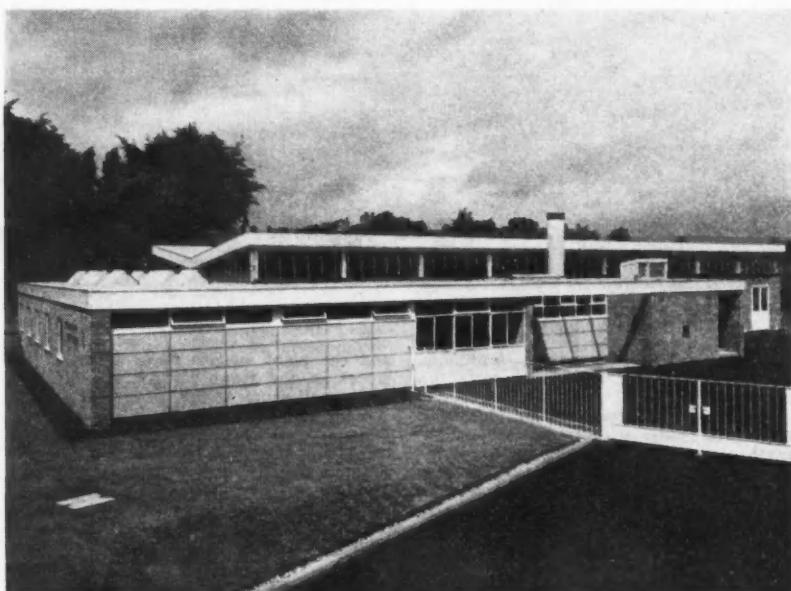
This has been achieved by the closest co-operation between the Ministry of Works and the Post Office in the study of all aspects of the planning and design of telephone exchange buildings and by the application of the latest developments in telecommunications engineering.

The contract was let to Pochin, Ltd., in October, 1959, on a firm-price basis. Work

started on October 29, 1959, and was completed on July 5, 1960, three weeks before time. Due to meticulous pre-planning there were virtually no variations on the contract.

The final account is almost completed and the final cost is expected to be approximately £23,000. This gives a cost per super. foot of the building of £2 17s. 6d. inclusive, and £2 6s. 6d. exclusive of external works. These figures exclude the cost of the lighting installation.

The project is the work of the Joint Post Office/Ministry of Works Research and Development Group set up by the Minister of Works and the Postmaster-General in 1957. The Group's chairman is Mr. J. O. Stevens, F.R.I.B.A., supervising architect, Ministry of Works, and the leading Post Office representative was Mr. W. K. MacKenzie, O.B.E., deputy regional director, who has since been succeeded by Mr. A. Crisswell.



The completed building

GLASGOW WATER DEPARTMENT VISIT

Both old and new installations of the Glasgow Corporation Water Department were recently visited by a party of about 40 members of the Scottish Section of The Association of Waterworks Officers.

The first place visited was the Buchley pumping station, situated about four miles on the north-east side of the city. This station, which was opened in 1950, comprised part of the East Main Works, and pumps continuously at the rate of about 17 m.g.d. to the east and south-easterly parts of the water area in a concrete lined cast-iron main of 36in., 30in. and 24in. diameters laid in the post-war period from the reservoirs at Milngavie to Castlemilk, approximately 20 miles in length and including a crossing over the River Clyde.

The pumping station is of reinforced concrete-framed construction and contains four sets of electrically driven centrifugal pumps, each capable of delivering 7.5 m.g.d. against a head of 160ft. The motors

are rated at 280 b.h.p. the electric power being taken from the grid.

From Buchley the party moved on to the Milngavie Works situated about eight miles north of the city where they inspected the tunnel outlets from Loch Katrine, the Mugdock and Craigmaddie balancing reservoirs which hold about 12 days' supply to the city, together with the measuring weirs, etc. Other points of interest were the reservoir draw-off towers—the straining wells—chlorination and meter houses and other post-war works including the pipe tunnel linking up the 10 36in. diameter trunk mains to the city.

Further works inspected included the new water tower for supplying the neighbouring Barloch estate, together with the newly laid 60in. diameter by-pass which makes a direct connection from the Loch Katrine tunnel outlets to the 10 trunk mains supplying the city and thus bypassing the Mugdock reservoir for use in

£1½M. RESERVOIR CONTRACT AWARDED A. E. FARR

A CONTRACT worth about £1½m. has been placed with A. E. Farr, Ltd., Westbury, Wilts., for the construction of the Dovestone Reservoir, near Ashton, Lancs. Work will start early next month and will take about four years to complete.

Included in the contract is the construction of a 100ft. deep cut-off trench, approximately 2,000ft. long, the placing of earth embankments with a puddle clay core, and the sinking of an 85ft. deep valve shaft.

G. H. Hill and Sons, Manchester, are the consulting engineers for the scheme, which is promoted by the Ashton-under-Lyne, Stalybridge and Dukinfield District Water Board.

DIRECT LABOUR PROPOSAL AT ROTHERHAM

Rotherham B.C. have agreed that their Finance and General Purposes Committee be instructed to make recommendations to a future council meeting for the financing of a direct labour department.

The chairman of the Building Works Committee told the Council that the repair and maintenance of corporation property called for such a department. Last year, he said, over £151,000 worth of work was carried out, including the painting of 1,500 houses and the replacement of 351 fireplaces.

The council now had 9,000 houses under their care, and he hoped that in the near future a building works manager would be appointed.

I.O.B. REVISE EXAMINATION STRUCTURE

A new publication by the Institute of Builders, entitled Regulations and Syllabuses for the Professional Membership Examinations, was introduced last week by the president, Mr. G. O. Swayne.

The booklet is the result of three years' review and reappraisal of the educational and technical training requirements for supervisory and management personnel within the building industry. Of special interest are the general educational qualifications for entry to membership and the scheme of exemptions through examinations of other bodies, both of which are set out in considerable detail.

Copies of the new regulations are obtainable from the Secretary, 48 Bedford Square, W.C.1, price 2s. 6d., post free.

any emergency or major repairs affecting the reservoir.

The chief engineer and general manager to the Water Department is Mr. Stanley D. Canvin.

WHO BUYS HOUSES?

A survey undertaken by the Co-operative Building Society shows that most people are under 34 when they purchase a house. About two-fifths of purchasers are between the ages of 25 and 34 and two-thirds between the ages of 25 and 44.

Most people embark on house purchase with an income of under £15 and they buy a house costing under £1,800. Purchase is spread over the whole range of occupational groups but salary earners purchase more new houses than wage earners.

A large number of deposits are for less than £200—over one-half are below £300. The average loan is £1,440.

RESTORATION OF 17TH-CENTURY FLAMSTEED HOUSE AT GREENWICH

FLAMSTEED HOUSE, Greenwich, a 17th-century Wren building, with a 19th-century wing, has recently been restored and adapted as an extension to the National Maritime Museum—a formidable task, complicated by the existence of much that was out of keeping with the Wren building.

The decision to install an automatic gas-fired boiler for a new underfloor heating system meant that 19th-century chimney stacks, for instance, could be demolished without loss. The removal of some unoriginal balustrades at roof level has revealed the true form of the Wren consoles. Equally important, by dispensing with an external staircase, the replacement of one of the magnificent windows to the Octagon Room has been achieved.

Another important piece of work involved the restoration of the shaped cupolas to two flanking pavilions, one of which has had a wall rebuilt in matching facing bricks and incorporating a tombstone discovered in the grounds that commemorates the second Astronomer Royal, Dr. Edmund Halley.

This particular pavilion has been given a new entrance and a circular bench seat placed inside will enable the visiting public to enjoy the view across the parkland from the shelter of a gazebo. The wrought-iron lamp holder here, as that of a wall bracket to light the main doorway, was designed and fashioned by Ministry of Works specialists.

Self-contained Suite

The other pavilion has been utilised to provide a small self-contained suite on three floors, as office accommodation for the museum curator. Between the two pavilions is a walled terrace which also had to be cleared of obstructions to provide an easy circulating area for visitors. Underpinning of the foundations to the original Wren building was necessary.

Other exterior work to the building includes attention given to brickwork—in one place internal dry rot fungus had broken through the external wall—and redecoration. When attention was given to the quoins, it was discovered that those on the east pavilion were of wood, not stone;

in fact, other pieces of architectural ornament had been prepared in a variety of materials but the general application of stone-coloured paint now disguises these differences.

Internally, the decision to restore the residential portion as near as possible to its original state, making use of the Octagon Room and the 19th-century portion as

moulded cornice, that needed little in the way of repair, has been retained and the historical treatment of white and pastel blue decoration enhances the height of the room. Here, as elsewhere in the building, floor strengthening has been achieved by the insertion of steel and new timbers.

The principal exhibition galleries to house astronomical instruments have been



Main entrance and south-east elevation after restoration

museum galleries, determined the nature of the work to be carried out.

From the main door, visitors can directly ascend, via the 17th-century staircase, to the Octagon Room which, in addition to the restored window, has had a second doorway opened up to permit access to a newly constructed staircase that now leads to the 19th-century extension. An original

fashioned out of a number of small rooms by removal of the old partitions. One such room, however, to be named the "Pond" Gallery, has been retained as an example of its kind. In it a fireplace with a carved wood and marble surround has been restored, and the chosen colour-scheme accentuates the period. A modern colour-scheme was selected for the principal galleries which have been fitted with adjustable spotlights to allow for flexibility in the rearranging of exhibits.

On a lower level still yet another gallery has been made by throwing a few small rooms into one and, again, steel beams had to be inserted to support the upper floors.

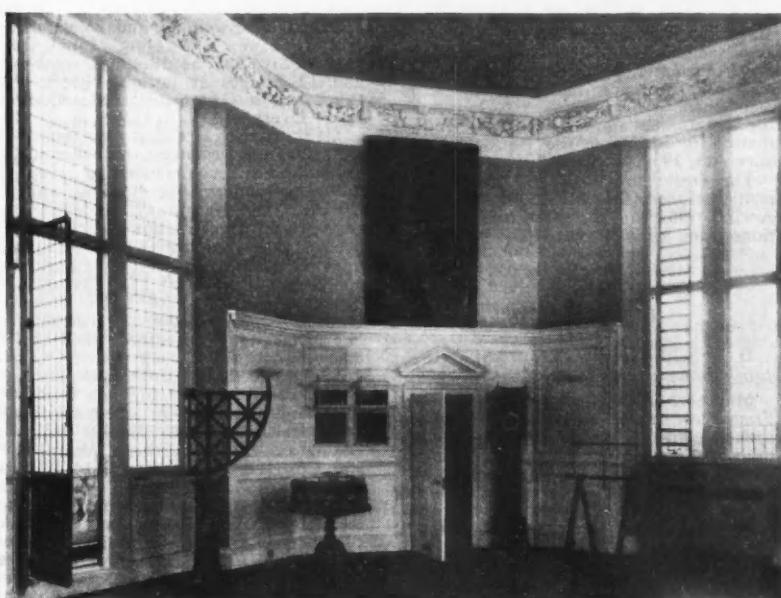
Residential Quarters

The residential quarters, which comprise a series of four adjoining rooms on two floors, have had some later partitioning removed to restore the rooms to their original sizes. Wood panelling has been given attention throughout and decorated in a colour scheme appropriate to the age in which the dwelling was designed. Likewise, new lighting wall brackets have been chosen from the design point of view to approximate to the contemporary style of the period. An interesting feature in the upper storey is the existence of ceiling beams which support and follow the shape of the Octagon Room above.

Final stages, reached early this month, involved the reinstatement of the courtyard and Flamsteed's walled garden.

The consultants for the restoration were: Surveyor—J. R. H. Millman; architect in advisory capacity—H. G. Yexley; engineer—D. Clayton.

Mullen and Lumsden, Ltd., were the main contractors. Comyn Ching and Co. did the heating work, and Beasley Electric Co., the electrical work.



Octagon room

KHASM EL GIRBA DAM, SUDAN**Tenders to be Invited**

THE Ministry of Irrigation and Hydro-Electric Power of the Republic of the Sudan propose to invite tenders for the main civil engineering work for the Khasm El Girba dam scheme. This comprises the construction of a buttress concrete dam across the river channel, with earth dams on either flank, together with control gates and other equipment. The concrete dam will have a length of 350 metres and a maximum height of 55 metres above river bed level. The length of the earth embankments will be approximately 3.5 kilometres. Associated works will consist of the construction of permanent and temporary housing with roads and sewers.

In an advertisement appearing on page 417 of this issue the Ministry are inviting applications from interested contractors.

L.C.C.'s 1960/61 HOUSING ESTIMATES

At their meeting on Tuesday, the L.C.C. were recommended to approve a capital estimate of £15½m., for housing during 1960-61.

Of this total, which compares with £16.35m. last year, £2¾m. is for the acquisition of land and £11¼m. is for the erection of dwellings. Provision for over £1m. is included for the council's agency work at Haverhill, Luton, Huntingdon and Thetford under the Town Development Act.

The council's maintenance estimates for the year total £20,962,700, representing an increase of £873,345 over last year which is partly due to the increased number of dwellings to be maintained.

BIRMINGHAM EXPLAIN ROAD PROPOSALS

A public meeting was arranged recently by Birmingham Corporation for the purpose of giving to local residents and traders details of the proposed £1,050,000 under-pass scheme at Six Ways, Aston, on which work will probably commence within the next 18 months.

The meeting was the second of its kind, and is part of a new policy being implemented by the Corporation in which large road schemes will be explained to people who may be affected by them. Other meetings will be held in connection with the improvement schemes elsewhere in the city.

PROGRESS OF L.C.C. HOUSING OPERATIONS

The Housing Committee of the L.C.C. report that since the war and up to March 31, 1960, sites totalling 8,632 acres had been approved for housing purposes.

These sites provide space for 132,000 new dwellings, of which 102,297 were built or under construction on that date. During the last financial year 4,169 dwellings were completed, compared with 5,513 for the previous year.

Some 19,805 dwellings had been declared unfit or dealt with by agreements on March 31, 1960, under the post-war slum clearance programme.

LOANS SANCTIONED

During the quarter ended June 30, 1960, the Minister of Housing and Local Government sanctioned the following loans to local authorities in England and Wales: Housing (land, dwellings, roads, sewers, etc.) and advances and grants under Hsg. etc. and S.D.A. Acts, £64,789,523; sewerage and sewage disposal, £9,529,772; water supplies, £4,814,306; highways, £3,092,607; public lighting, £2,231,944.

SHETLAND BRIDGES PROJECT

ZETLAND COUNTY COUNCIL have appointed Blyth and Blyth, the Edinburgh consulting civil engineers, to survey and prepare designs for bridges to link the mainland of Shetland to the islands of Trondra and Burra.

The scheme was recently given favourable consideration by the Highlands and Islands Advisory Panel during their visit to Shetland.

Two major crossings of the exposed navigable channels which separate these islands are involved near Scalloway, and when completed the new roads and bridges will form a vital link for the development of Trondra and Burra.

The site investigations are now in progress.

SUCCESS OF SUNDERLAND'S DIRECT LABOUR DEPARTMENT

Last year, Sunderland Borough Council's public works department obtained £252,000 worth of work through competitive tendering with private enterprise contractors.

Mr. Stephen Stone, public works manager, reports in his annual review that during the year there was an average weekly issue of maintenance work orders to the department of 1,418 and an average of 1,340 orders a week were completed.

Twenty-three building contracts were completed during the year and 16 civil engineering jobs were finished. At present, six building contracts—including the first phase of the South Johnson Street Technical College—and nine civil engineering contracts have yet to be begun.

GLAMORGAN OIL TERMINAL SCHEME

A contract is expected to be placed next month by Mobil Oil Co., Ltd., for the construction of a new sea-fed bulk terminal at Barry, Glamorgan.

The installation will probably be in operation by the middle of 1961, and will have a storage capacity of 5,000 tons. It has been designed by the company's staff engineers, and will be established on a nine-acre site leased from the British Transport Commission at Barry Docks.

NEW GRADUATED PENSION SCHEME**Introduction in April, 1961, Confirmed**

Now that the main regulations required to complete the structure of the new graduated contribution and retirement pension scheme have been made, Mr. John Boyd-Carpenter, Minister of Pensions and National Insurance, has made the Commencement Order necessary to implement the Government's previously announced intention to introduce the National Insurance Act, 1959, in April, 1961.

The Order provides that the flat rate contributions will start to be paid from April 3, 1961, and the graduated contributions from April 6, 1961.

Obituary

It is with regret that *The Contract Journal* records the death of the following:

M. André Coyne, aged 69, the eminent French consulting engineer. He was responsible for the design of over 100 dams built in France and many other countries among them the Kariba Dam in Rhodesia which is the largest pure arch type in the world.

Mr. N. B. Harris, chairman of Franks Harris Bros., Ltd., Guildford, Surrey.

Mr. Arthur Lumb, M.B.E., A.R.I.B.A., Dip.Arch.(Leeds), county architect of Cumberland. Mr. Lumb was appointed to the post early this month.

Late Construction News

CITY CLEANSING DEPOT.—The tender of Holland & Hannen and Cubitts, Ltd., at £885,908, the lowest of 10 submitted, has been accepted by the City of London Court of Common Council for the final stage of construction of the new public cleansing depot and wharf at Upper Thames Street, London, E.C.4. The contract covers the superstructure and mechanical and electrical installations.

FLATS AND OFFICES SCHEME.—Robert Hart and Sons, Ltd., 121 Victoria Street, London, S.W.1, have been awarded a £116,980 contract for construction of the 10-storey block of flats and offices at the Alexandra Theatre Site, Stoke Newington, for the B.C. The consultants for the scheme are: Howes and Jackman, architects, 1 Verulam Buildings, London, W.C.1; Hurst Peirce and Malcolm, consulting engineers, Artillery House, Artillery Row, London, S.W.1; and E. C. Harris and Partners, quantity surveyors, Lynton House, Tavistock Square, London, W.C.1.

16-STORY OFFICES.—A 16-storey office block to be built on the south side of Putney Bridge, London, S.W.15, by Holland & Hannen and Cubitts (Great Britain), Ltd., will be 187ft. high. It will have a floor area of 62,000 sq. ft., and will cost about £300,000. The agents for the owners are Collins & Collins and Rawlence. Plans are by Guy Morgan and Partners, 12a Eaton Square, London, S.W.1; the quantity surveyors are Wakeman, Trower and Partners, 47 Bloomsbury Square, London, W.C.1; and the consulting engineers, Bylander, Waddell and Partners, 169 Wembley Park Drive, Wembley.

PRIVATE FLATS AT COVENTRY.—Final drawings are being prepared and a contract is expected shortly for the erection of an 11-storey block of flats, surrounded by three- and four-storey flats and maisonettes, at Coventry, for the Townsend Development Group. The scheme, known as the Kenilworth Court, will cost about £450,000 and has been designed by G. R. Stone, consultant architect to the agents, Cartwright and Son, Coventry. Leonard and Grant, 171 Victoria Street, London, S.W.1, are the consulting engineers.

LONDON AIRPORT TAXIWAYS.—A contract worth about £350,000 has been awarded to Sir Lindsay Parkinson and Co., Ltd., 6 Lambeth Road, London, S.E.1, for construction of the northern apex taxiways and hardstandings at London Airport. The work is expected to be completed in October, 1961.

DWELLINGS AT LIVERPOOL.—The following tenders have been accepted by Liverpool City Council, subject to Ministry approval: 64 dwellings and 26 garages at Higher Lane and Long Lane—Direct Labour, £109,985; 54 dwellings, eight shops and 12 garages at Furlong Street—Peak Construction (Liverpool), Ltd., 95 Broad Lane, Liverpool, 11, £132,969.

MANCHESTER HOUSING AWARDS.—At their meeting yesterday, Manchester City Council were recommended to accept the following tenders: 142 dwellings and two laundries at Harpurhey Redevelopment area—Cuban Construction Co., Ltd., Manchester, estimated cost £330,307; 240 dwellings at Rose Hill, Marple—Henry Boot and Sons (Manchester), Ltd., £393,328; 351 dwellings at Councillor Lane, Cheadle—Direct Labour, £552,249; 179 dwellings and two laundries at Bradford Road and 28 dwellings at Mill Street, Ancoats—Direct Labour, £412,668; design and construction of the reinforced concrete framework and foundations for two nine-storey blocks at Glebelands Road, Baguley Hall and Ossington Walk, Northern Moor—Holst and Co., Ltd., Manchester, £141,384 and £145,482.

MOTORWAY BRIDGES.—Davies, Middleton and Davies, Ltd., Cardiff, have obtained a sub-contract from A. Monk and Co., Ltd., Warrington, to construct four bridges on the Bristol to Birmingham Motorway, contract 1. One of these is the Norton Viaduct, the biggest bridge on the contract. Work on it has just commenced.

OFFICE BLOCK BUILT OVER STATION APPROACH AT MIDDLESBROUGH

A FOUR-STORY office block recently completed at Middlesbrough station for the Tees-side Traffic Manager of British Railways has its main wing projecting over the station approach road, entirely supported off the ground on four columns to form a bridge span with an underpassage for vehicles and pedestrians.

The construction of the building, known as Zetland House, follows contemporary practice in employing the shell-frame principle, in which the main weight of the building is supported on a steel frame, giving floor areas free from structural fixtures. The heaviest stresses occur in the 52ft. clear span between the four supporting columns that carry the projecting wing, and in the 30ft. adjoining span between the centre columns and the main block.

These stresses are carried on special 5ft. deep reconditioned bridge girders re-

covered from a former railway bridge. The four supporting columns, each carrying up to 200 tons, have as their central core special universal beam sections of a new type, supplied by Dorman Long and Co., Ltd., encased in reinforced concrete.

Floors are formed of prestressed precast concrete beams, and floor screeds are of light vermiculite concrete laid to a depth of 3in., topped with 3/16in. thermoplastic tiles. Corridors, halls and the control room have a 1/2in. cork tile finish-sealed after laying.

The external walls are of cavity construction. The facing panels used on the intervening levels between the windows on each floor are of 2in. precast exposed aggregate containing a mixture of Derbyshire spar and Criggion granite. Windows are of steel throughout, specially manufactured of medium universal section, with silver anodised aluminium fittings.

The inner leaf of the walls is of 4in.

lightweight concrete block, with a plaster covering of the vermiculite aggregate insulating type. Interior partitions between offices are light demountable units, the steel frame construction of the building making structural fixtures unnecessary. The units are of standard 4ft. size and have vertical chases to accommodate electrical and telephone conduits.

Suspended ceilings of 2ft. square asbestos bound panels backed with insulated quilt afford fire protection to the steel beams. The internal stanchions are likewise encased in a double thickness of asbestos insulating board.

An oil-fired low-pressure central heating boiler plant and fuel tanks are located in a basement boiler room. This serves the entire group of station buildings as well as the new office block and for this reason it was one of the first parts to be completed. It was actually in use throughout the winter and materially assisted the early completion of the office accommodation.

Zetland House, with its long continuous windows on each floor, presents a striking modern appearance beside the weathered Gothic of the station buildings. The rear view of the building is equally impressive, the most striking feature being a deep mullioned window that runs the full height of the building to admit light to the stairwell.

The building, which provides 19,500 sq. ft. of office space, was designed in the architect's office of the chief civil engineer of the North-Eastern Region of British Railways, York. Assistance in preparing the working drawings was given by Brierley, Leckenby and Keighley, Lendal, York. The main contractors were Richard Costain, Ltd.

OVER TO NON-TRADITIONAL

Because of slow building progress on the Lewsey Housing Estate, largely attributable to the shortage of bricks, Luton Corporation proposes to turn to non-traditional house construction and has accepted a tender from John Laing and Son, Ltd., for the construction of 470 "Easiform" houses. One firm refused to execute a contract for 170 houses and 146 garages in traditional construction until they were assured of an adequate supply of bricks and the Council have withdrawn the acceptance of their tender.



This view, from Zetland Road, shows both wings of the building

(Concluded from page 433)

The tenants seem to be happy in the new houses and the urban council has expressed its warm appreciation of what has been done.

Donaghadee. Part of one side of Moat Street was rebuilt in 1956 and 48 houses were demolished. The rebuilding of the other side of the street had to be deferred but work has now started on 28 houses which will complete the scheme.

Portaferry. The redevelopment of Ann Street was carried out in 1959 and tenants of the unfit houses on this site and in Steel-Dickson Avenue were rehoused. It is hoped to place a contract in the year 1960/61 for the rebuilding of 20 houses on the ground cleared in Steel-Dickson Avenue.

Richhill. Richhill has an active and well-informed town committee which is deeply interested in the improvement of the village and the redevelopment was undertaken after consultation with the committee. Although it is a small scheme of only 20 houses, it is of great importance to the village as it forms part of the central square. The Trust's architects designed this group of buildings with great care so

as to harmonize with the 18th century architecture of the village. The result is a pleasing blend of old and new.

House Types

Every site has to be planned according to its natural features, but standard types of houses and flats can be used in different combinations on various sites. Exceptions to this may be redevelopment schemes such as Richhill where houses and flats are designed specially for the site.

The Trust's technical staff is constantly redesigning the standard types and, in the past year, the most important new design to come into use is a three-bedroomed, one-living-room house with a dining-kitchen to replace that known as the K type. This new house (known in the Trust as 57A) has proved popular with tenants. By variation in design it is possible to provide in the same terrace, the basic type, three-bedroom houses with larger bedrooms or four-bedroom houses, or a combination of the three. At present the basic type is let at 21s., the larger three-bedroom house at 22s. and the four-bedroom house at 23s. 6d. per week.

The Trust has also continued to build the larger house with two living-rooms

(J type) which has been a favourite with tenants for some years. It is now let on most estates at 26s. per week.

Two new "corner" flats have also been designed, the accommodation being a living-room and two bedrooms.

Old People's Dwellings

Some 600 of these have been built or are under contract. They have always been much appreciated and the Trust has decided to provide a higher proportion of them in new estates. The current type is a bungalow with a living-room with bed-recess and it is proposed to increase slightly the size of this room. Two new types have been evolved, one with a separate bedroom in place of the bed-recess, and one with two bedrooms. In future these three designs will be combined in terraces to give a variety of accommodation.

Gardens and Parking Spaces

Increased space for garages has been allowed in current plans. Access to the backs of terraces has also been provided in certain instances so that garages or parking spaces can be made available convenient to the houses.

July 28 1960

Men and Movements

CHANGES in the board of George Longden and Son, Ltd., following the acquisition of that company by the Bleachers' Association, are as follows: Mr. J. D. W. Longden relinquishes his chairmanship but will continue as executive director; Mr. J. N. Hancock continues as managing director with a seven-year service agreement; Mr. C. D. Greenhalgh, a director of Bleachers' Association, joins the board of George Longden as chairman; and Mr. E. G. Goold, also a member of Bleachers' board, becomes a director.

Following the David Brown Corporation's re-forming of product groups to accelerate expansion, the directors of David Brown Tractors, Ltd., parent company of the tractor and agricultural machinery group, have been announced. They are Mr. David Brown (chairman and joint managing director); Mr. David Brown, junior (joint managing director); Mr. J. Thompson (general manager); Mr. L. V. Gallagher (manufacturing); and Mr. J. D. Elstone (marketing).

Mr. Terence Gregg, B.Sc., formerly of Whitehead, Co. Antrim, has been appointed chief engineer and a director of the Canadian firm of consulting engineers, Morrison, Hersfield, Millman and Higgins. Mr. Gregg has been supervising bridge engineer of the Foundation Engineering Corporation for the past six years.

Former financial director and secretary of the Goodyear Tyre and Rubber Co. (Great Britain), Ltd., Mr. W. R. Booth, who was recently appointed an assistant treasurer of the parent Goodyear Tyre and Rubber Company in Akron, Ohio, has now been named treasurer of the subsidiary Goodyear International Corporation.

Captain M. A. K. Fraser, M.I.Struct.Eng., engineering director of Griffiths Bros. and Co. London, Ltd., has completed 50 years' continuous membership of the South Wales Institute of Engineers, and has been granted life membership.

A new director of Williams and Williams, Ltd., is Mr. W. W. Hicks Beach, M.P., a partner in the firm of Payne, Hicks Beach and Co.

Professor Pier Luigi Nervi, the Italian architect and engineer, and this year's R.I.B.A. gold medallist, has been visiting Scotland to receive an honorary degree from Edinburgh University. He is to be asked by the University to design their playing fields.

Following the appointment of Mr. W. F. Amies as chief executive of the converted products division of the Reed Paper Group, further management changes have been announced by The Key Engineering Co., Ltd. Mr. K. A. Skinner has joined the board as general manager. Mr. H. L. Harclerode has been appointed general sales manager and will be responsible for all sales inquiries. Mr. F. V. Wickham will in future be responsible for technical development, and Mr. G. H. Mortley has been appointed commercial manager.

Mr. Gordon Patterson has been elected president and a director of The Yale and Towne Manufacturing Company, in succession to Mr. Gilbert W. Chapman, who has retired.

Thomas Smith and Sons (Rodley), Ltd., have announced the appointment of Mr. J. I. Hunt as works manager. Mr. Hunt, who joined the company in 1959 from Aveling-Barford, Ltd., was formerly assistant works manager, and he is succeeded in



J. I. HUNT

A. DEAR

this post by Mr. A. Dear. The appointments follow the retirement of Mr. David Keighley, who has been with the company for 45 years, the last 25 of which have been spent as works manager.

Sir Thomas Overy has resigned the chairmanship of G. A. Harvey and Co. (London), Ltd., on medical advice but will remain a director of the company. He has been succeeded as chairman by Mr. D. A. S. Donald, chairman of the National Cash Register Co., Ltd.

Thyssen Shaft Sinking Co., Ltd., have announced the appointment of Mr. Charles Gordon Pickett as chief civil engineer of the company's new civil engineering contracts section. Wesleigh House, Coombe Lane, New Malden, Surrey.



Mr. E. Oakley, who earlier this year, completed 50 years' service with Sir John Jackson, Ltd., was recently presented with a gold watch by the chairman of the company, Sir Percy Rugg.

At the recent annual general meeting of the Federation of British Rubber and Allied Manufacturers, the following officers were elected for 1960-61: president—Mr. H. G. W. Chichester-Miles, Empire Rubber Co., and Rubber Bonders, Ltd.; vice-presidents—Mr. S. D. Sutton, Veedip, Ltd., and Mr. C. H. M. Baker, Firestone Tyre and Rubber Co., Ltd.

Holman Brothers, Ltd., Camborne, Cornwall, have appointed Mr. H. S. Warwick manager of the Holman West African branch at Takoradi in succession to Mr. A. Vernon

Gallie, who has retired after 25 years' service as manager. Mr. Warwick joined the company from Ashanti Adowsena Banket Goldfields, Ltd., in 1943, and served in the West African branch for five years prior to moving to East Africa. There he assisted in the formation of a new Holman branch with headquarters at Nairobi and he was its manager until 18 months ago when he was temporarily transferred to Holman Brothers (Pty.), Ltd., Johannesburg.



H. S. WARWICK

The new president of the Engineer's Guild for 1961 will be Sir Hugh Beaver.

A new director and general manager of Workington Iron and Steel Co., Ltd., a subsidiary of United Steel Companies, Ltd., to succeed Mr. T. S. Kilpatrick, next November, is Mr. H. M. Henderson, at present a director and general manager of Unisteel Structural (Pty.). Mr. Kilpatrick becomes a director and general manager of Steel Peech and Tozer, Ltd., another subsidiary, next month. Mr. T. Sanderson, a director and general works manager of Workington Iron and Steel, has been appointed deputy general manager.

Among passengers disembarking from the "Queen Mary" at Southampton last week was Mr. J. Gourley, managing director of Stothert and Pitt (Engineers), Ltd.

MUNICIPAL

After 41 years' service in local government, Mr. Maurice J. Hellier, county planning officer to Derbyshire C.C., and a former president of the Town Planning Institute, will retire at the end of September. He will be succeeded by his deputy, Mr. Arthur Latham.

Woolwich B.C. have been recommended to establish a new post of chief architect, and to appoint Mr. J. O. W. Jones, at present chief assistant architect, to this position.

Bridgnorth B.C. have appointed Mr. William L. Booy, at present surveyor and public health inspector to Charlton Kings (Glos.) U.D.C., as borough surveyor in succession to Mr. Maurice M. Dixon, who leaves in August to take up a post with a Midlands contracting firm.

Mr. D. W. Derbyshire, engineer and surveyor to Rugeley (Staffs.) U.D.C., and Mr. R. Ingram, deputy engineer and surveyor, have resigned.

Mr. Donald G. Cockrill, borough surveyor at Boston for the last 34 years, has retired.

£320,000 BASILDON TOWN CENTRE CONTRACT

14-storey Block of Flats

BASILDON, Essex, will be the first new town to have a residential building in the town square, to which pedestrians only will have access.

The Development Corporation are to build a 160ft. high, 14-storey block of flats as the dominant feature of their town centre. The contract, worth £320,000, also provides for a basement garage and three two-storey shops at ground level. Work is about to start and will take 19 months to complete. Holland & Hannen and Cubitts (Great Britain), Ltd., are the contractors.

The 14-storey block will stand on eight 27ft. high V-shaped concrete legs, and will directly adjoin the shops. Two thirds of the flats will have one bedroom and the remainder two bedrooms. They are designed to minimise exterior maintenance. Aluminium window frames will be used on the splayed double-glazed windows, and there will be no exterior painting.

The tower will cover an area of 93ft. by 48ft., and there will be a basement for about one-third of the area for service rooms and lift wells. The eight R.C. Pilots will rise from 16 bored piles to support the building.

Seven-inch reinforced concrete hollow pot floors will be supported on 6in. reinforced concrete cross walls in alternating bays of 20ft. and 8ft. Upstand reinforced concrete beams, faced with brickwork, on the long sides of the building at each floor level will carry the head and cill of the windows. The two end walls will be of 6in. concrete faced with brickwork, a nib being provided at each floor level to take the weight of the brickwork.



Artist's impression of completed building

and roofing will be on a vermiculite insulating screed.

The buildings were designed by Mr. A. B. Davies, chief architect-planner of the Corporation. Sir Basil Spence, O.B.E., is the architect adviser to the Corporation on the town centre.

The consulting engineers are Ove Arup and Partners, London, and the quantity surveyors, E. C. Harris and Partners, London.

TRAFFIC ENGINEERING DIPLOMA EXAMINATION Institution Announce Result

THE Institution of Highway Engineers have announced the result of their examination in traffic engineering held in April last, when 18 candidates drawn from all parts of the United Kingdom sat for the first examination in this country devoted wholly to this important subject.

The following candidates were successful: A. N. Crowther (assistant traffic engineer, Lancashire C.C.); E. R. Emery (senior assistant engineer (Traffic) Kent C.C.); J. L. V. Lomas (senior assistant engineer, Coventry City); J. E. Reed (deputy county surveyor, Isle of Wight C.C.); D. L. Selby (assistant engineer, Margate Corporation); R. Sheath (senior assistant engineer, Hertfordshire C.C.).

The Graham Bennett Prize of a silver medal and books to the value of £10 for the candidate gaining the highest aggregate of marks in the examination was awarded to Mr. R. Sheath, to whom the Council of the Institution have offered their congratulations on the high standard of written answers and of the set-piece submitted.

The Institution state that applications to sit for the next examination, in April, 1961, should reach the Secretary of the Institution of Highway Engineers, 47 Victoria Street, London, S.W.1, prior to September 1 next. Entry is open to members of the Institution or candidates qualified so to be.

CLERKS OF WORKS TRAINING

Outline recommendations have been sent to more than 300 technical colleges throughout the country by The Institute of Clerks of Works of Great Britain Incorporated in connection with training of clerks of works in preparation for their Part II Examination.

The recommendations include suggestions that courses for the Part II should fall into one of the three following categories: a course of two to three years' duration (approx. 120 hours each year) designed to meet the needs of mature men probably over 30 years of age who already have experience as clerks of works but have had little or no technical college training; a specially designed course of one or two years' duration (approx. 120 hours each year) to meet the case where a sufficient number of students possessing a Higher National Certificate in Building wish to go forward to take the Part II Examination; or a supplementary course to meet the case where relatively few H.N.C. students come forward for further training and it is inexpedient to run a special course of preparation for the Part II Examination.

N.F.B.T.E. PRESIDENT ATTACKS SHODDY BUILDING

"Increase Over Recent Months"

SPEAKING last week at the half-yearly meeting of the Northern Counties Federation of Building Trades Employers, the national president, Mr. D. E. Woodbine Parish, said:

"I do not think that the recent increase in Bank Rate should cause building firms to lose their confidence in the future. There is plenty of work in hand and the long-term outlook suggests that the building programme will continue at a high level."

"There is, however, one aspect of our industry today which should, I consider, give all of us cause for concern. It is the noticeable increase over recent months in what I can only describe as shoddy building."

"We have all seen evidence of it in

brickwork, plasterwork, painting and joinery. Most of it is perpetrated by firms and organisations which have no real roots in the building industry and consequently have little or no regard for its prestige and well-being. They are concerned only with 'getting by' with the lowest admissible standards of workmanship, with doing the job in minimum time and with making the maximum profit, regardless of the plight in which the client or building owner may subsequently be left."

"I want to say emphatically that member firms of the National Federation of Building Trades Employers are in no circumstances prepared to lower their standards of integrity, competence and performance to counter the kind of competition that firms of not altogether reputable character introduce. We stand by the maxim of

a sound job for a fair price and we are not prepared to accept into membership any firm unless it can show conclusively that it observes this principle."

"It is open to every building owner, whether public authority or private householder, to choose his builder. In their own interests I trust that they will take note of my comments and thereby play their part, with the N.F.B.T.E., in eliminating the unhealthy rash of sub-standard work which is currently afflicting the industry."

CAR PARKING CONVENTION

Change of Venue

So many applications have been received from local authorities to send official delegates to the one-day convention on "The Problem of Car Parking" that the meeting will now be held on October 6 at the Central Hall, Westminster, instead of at the Caxton Hall, announces the Institution of Municipal Engineers.

COMPLETION OF FIRST BUILDING ON LONDON'S NEW ROUTE 11

A USTRAL HOUSE, the first new building to be completed on the new City Route 11, now part of London Wall, was officially opened recently as the United Kingdom headquarters of the National Mutual Life Association of Australasia, Ltd.

The building, an eight-storey office block with the main entrance in Basinghall Avenue, was erected by Myton, Ltd., for the Wool Exchange and General Investments, Ltd.

With over 65,000 sq. ft. of office space and a basement car park, Austral House is in concrete-encased steel framing and has been designed with special care to meet the requirements of the Royal Fine Art Commission and the City Corporation for buildings flanking the new thoroughfare.

The Ceraglas wall cladding, of three-toned fired ceramic enamel fused on glass, with which the building is faced, is the first of its type to be used in this country. Australian

wood as panelling is a feature of the offices.

The architects were Gunton and Gunton, F.R.I.B.A., F.R.I.C.S., with Gotch and Partners, F.L.R.I.B.A., responsible for additional interior work, including decorations, partitions and fittings; the consulting engineers, J. L. Wheeler and Jupp, and the quantity surveyors, Franklin and Andrews.



Austral House

FOR THE DIARY

Aug. 30

Royal Institution of Chartered Surveyors. Annual conference at the University College of North Wales, Bangor. Aug. 30-Sept. 3.

Sept. 8

Meeting of the Southern Counties branch of the Contractors Mechanical Plant Engineers, The Surrey Tavern, Morden Road, Morden, 7.30 p.m. Film show.

Sept. 9

Building Surveyors' Institute Dinner Dance, Waldorf Hotel, London.

Sept. 13

Eighth annual residential study course arranged by the South-Western District of the Institution of Municipal Engineers, Dillington House, Ilminster, Somerset. Sept. 13-15.

Sept. 14

Meeting of the Western Branch of the Institution of Plant Engineers, Royal Clarence Hotel, Exeter. 7 p.m. Film and talk on the construction of the M.1 Motorway.

Sept. 16

Meeting of the Birmingham branch of the Institution of Plant Engineers, Imperial Hotel, Birmingham. 7.30 p.m. Mobile Plant Discussion Group.

Sept. 21

Conference of the British Waterworks Association, Edinburgh, Sept. 21-23. Factory Equipment Exhibition, Belle Vue, Manchester. Sept. 21-Oct. 1.

Sept. 30

Meeting of the Metropolitan and Southern branch of the Institute of Sewage Purification, Friends House, Euston Road, London, N.W.1. 6.30 p.m. Discussion—New and Pending Legislation—introduced by J. L. Spiller.

Oct. 3

Conference of the Institute of Quarrying, North British Hotel, Edinburgh, Oct. 3-6.

Oct. 6

Convention on Parking arranged by the Institution of Municipal Engineers at Caxton Hall, London, 10 a.m.

Oct. 11

Building Trades Exhibition, City Hall, Deansgate, Manchester, Oct. 11-22.

Annual dinner of the Contractors' Plant Association, Dorchester Hotel, London. 7.30 p.m.

Oct. 14

Annual dinner and dance of the Institute of Quantity Surveyors at the Trocadero Restaurant, London, W.1.

Oct. 18

Effluent and Water Treatment Exhibition and Convention, Seymour Hall, London. Oct. 18-21.

Oct. 19

Annual general meeting of the Institute of Quantity Surveyors at 6.30 p.m.

Oct. 21

Annual dinner of the Society of Engineers at the House of Commons.

Oct. 27

Meeting of the Metropolitan and Southern branch of the Institute of Sewage Purification, Friends House, Euston Road, London, N.W.1. 6.30 p.m. Paper "The Biological Treatment of Chemical Wastes," by I. S. Wilson and Miss E. Harrison.

Nov. 1

Annual dinner of the British Road Tar Association, Grosvenor House, London, W.1. 7.30 p.m.

Nov. 14

Public Works and Municipal Services Congress and Exhibition, Olympia, London, Nov. 14-19.

INSTITUTION OF HIGHWAY ENGINEERS

THE following elections took place at The Institution of Highway Engineers, on June 30, 1960:

Members

J. N. Bentham (borough surveyor, Whitehaven); D. Binah (head of civil engineering department, Sunderland Technical College); O. Davies (joint managing director, L. Fairclough, Ltd.); T. G. Grime (surveyor, Hindley U.D.C.); C. H. Heal (divisional surveyor, Devon C.C.); J. O. Leech (chief assistant, Liverpool City Council); H. Parks (surveyor, West Dean R.D.C.); R. Paul (assistant engineer, Ministry of Transport); C. R. Phillips (surveyor, Chippenham B.C.); H. S. Williams (surveyor, Wales and Monmouthshire Industrial Estates, Ltd.).

Associate Members

R. F. Breakell (assistant technical manager, G. and T. Earle, Ltd.); B. L. Clark (principal, Bernard Clark and Partners); H. R. Davies (engineering assistant, Swansea B.C.); T. L. Donegan (engineering assistant, Cheshire C.C.); T. Harrison (lecturer in engineering, Surrey C.C.); P. G. Hewitt (Birmingham University student); D. D. C. Johnston (director, Border Engineering Contractors, Ltd.); A. H. Mochrie (senior assistant engineer, Peterborough B.C.); I. A. Mohammed (divisional engineer, Ministry of Works, Trinidad); E. H. Monks (civil engineer, War Office); E. R. Pickworth (deputy county surveyor, Buckinghamshire); M. A. Prior (assistant engineer, Ruislip-Northwood U.D.C.); B. Raper (assistant engineer, Welwyn Garden City Dev. Corp.); M. Singh (civil engineer, Corps of Engineers, U.S. Army); L. S. Smalley (assistant engineer, West Bromwich B.C.); C. G. Turton (senior engineering assistant, Walsall B.C.); J. Wardle (senior engineering assistant, Wigan B.C.); J. D. Whalley (senior engineering assistant, High Wycombe B.C.); D. Whittaker (engineering assistant, Morecambe and Heysham B.C.); J. Williams (assistant engineer, Cardiff City Council).

Affiliates

J. A. Nurcombe (asphalt paving manager, Western Trinidad Lake Asphalt Co., Ltd.); R. M. Wickens (contracts manager, Chittenden and Simmons, Ltd.).

Students

A. D. Crowhurst (engineering assistant, Basildon Dev. Corp.); H. Powe (engineering assistant, Border Engineering Contractors, Ltd.); A. Robinson (pupil surveyor, Border Engineering Contractors, Ltd.).

BUILDING WORKING HOURS, GRADING AND ZONING Changes on October 3

The following changes in working hours, the grading of districts, and the London zoning, take effect on and from Monday, October 3, 1960.

Working Hours

The normal working hours throughout England and Wales will uniformly be 44 per week.

Grading of Districts

With the exception of the London region (as defined) and the Liverpool district, the rate of wages applying throughout England and Wales will be the Grade A current standard rate for craftsmen with the corresponding wage rates for labourers, apprentices, and young male labourers.

London Region—Zoning

The existing inner and outer zones of the London region (as defined) will be merged, and the rates of wages applying throughout the whole region will be the present London inner zone rates, i.e.:

Craftsmen Labourers

5s. Id. 4s. 5d.

with corresponding rates for apprentices and young male labourers.

£10M. EXTENSION TO I.C.I. PLANTS

Imperial Chemical Industries have announced that they are to build a £10m. extension to their plants at Wilton to add to their production capacity for nylon polymer. The extensions will provide a further 15,000 tons a year.

Talking of Safety

by
"DRAGEE"

A recent meeting I heard a safety worker say: "If you want people to replace guards, fix them in such a way that they're more of a nuisance when they're off than when they are in position." At which a member of the audience asked: "What happens if somebody falls over the guard?" And the speaker—who had evidently had that thrown at him before—promptly replied: "The injury he receives will be less than any he would get if he were trapped in the machine."

One of the audience rose to his feet. "I think that's a very questionable suggestion," he said. "Mr. Hopkins cannot possibly be certain that falling over a guard will be less dangerous than coming into contact with a machine. Does the speaker seriously consider that a deliberate hazard should be created in order to draw attention to a more remote one?"

"Yes," said the speaker, "I do." And he sat down.

Naturally there was quite a debate on this point, because even on contract work the question of machinery guards is one which crops up frequently. We may not all agree with "tough" methods such as the one under discussion, but most employers recognise the necessity for keeping machines guarded, and are well aware of the difficulties entailed. Talking about it after the meeting, Peter Walker, our site engineer, said:

"Some people seem to think that site machinery is a lot safer than factory plant. You and I know that's damn silly, of course, but how can we explain it to the site worker without actually shoving him through the cogs? What do we do about it?"

"Well, we send our foremen to safety training courses," I answered, "and we talk to them about the dangers of site machinery and we hope they'll pass it on to their underlings."

"I know—like Old Ted, the chap you were niggling at a few weeks ago! Until he started work with us, the only guards Ted had ever heard about were either in the army or else blowing whistles on railway platforms. He still thinks you were pulling his leg about fixing guards over the gears on a hand winch. Anyway, what does the Law say about it?"

"Very briefly, it lays down certain rules for particular classes of machinery—woodworking machinery, for example. Machinery in general is covered by sec-

"Dragee," who is a practising safety engineer, would welcome subjects for discussion in this column. All names of persons mentioned in these discussions are entirely fictitious. Questions of law are expressed as the author's personal opinions and are not claimed to be authoritative.—EDITOR.

tions 14 to 17 of the 1937 Factories Act and Building Regulations 85 and 86. These tell us that flywheels, all moving parts of engines and motors, all transmission machinery, and dangerous parts of other machines have to be fenced—with certain exceptions which I needn't go into just now. In addition, all power operated machinery used on building jobs has to be constructed in such a way that the dangerous parts are guarded—again with one or two exceptions."

"Are the dangerous parts actually specified?"

"Yes, in Building Regulation 86. The list includes the things I've already mentioned—flywheels, shafting and so on—also couplings, gearing, belt or chain drives, and projecting screws, bolts and keys. And, incidentally, if the supplier of the machine forgets to guard any of the specified items it's still our duty as contractors to have guards fitted."

"You mentioned that guards have to be fitted to dangerous parts of other machines, whether they are power-operated or not. How do you decide whether a part is dangerous or not?"

"I'm afraid it's quite impossible to give you an all-embracing definition. It's really a matter of common sense. What we tell the people at our training courses is this: If in doubt—fit a guard, and if you think it could only be harmful if someone were being downright stupid—fit a guard just the same, because some stupid so-and-so will come along sooner or later. Guards aren't just for the benefit of people who behave sensibly. And don't forget that men have been known to faint or trip over things, and fall against working machines."

"That brings me to another point. Machinery guards must be sufficiently robust to withstand knocks and bumps. If provision is made for detaching them, see that the fastenings are really secure when the guards are in place. Nowadays we go in for fitted guards, shaped to the bits of machinery they are intended to fence, rather than large over-all enclosures."

"I notice that some guards are made of sheet metal and others, wire mesh. Do the regulations specify either type?"

"No; that's a question of suitability. Sheet metal guards are strong but they are relatively heavy and expensive, and they mask the parts they're fencing. Sometimes it's desirable to see what's going on inside, and where points have to be oiled it is safer to poke the spout through the mesh than to remove it. Where greasing has to be done, it is better to bring extension tubes outside the fencing. The sizes of wire mesh are covered by British Standard Specification, but the rule is to make sure that the mesh is small enough to keep busy fingers out of harm's way!"

DEVELOPMENT OF RUBBERISED ROAD CONTINUES

ACCORDING to the 1959 annual report of the Natural Rubber Development Board—now renamed The Natural Rubber Bureau—good progress is being made in the development of the rubberised road.

"In countries such as the United Kingdom the emphasis is on limited-access high-speed motorways, ring roads, bypasses and the like; in the less populated or less developed countries the requirement is for serviceable all-weather roads which can be cheaply constructed and maintained."

The report says that rubber has much to offer each type of highway, although it may well be that its most significant contribution will be the low cost road.

Research

In the United Kingdom the research scheme in which the Board, the British Rubber Producers' Research Association and the British Government's Road Research Laboratory co-operate, continued during the year. This was supplemented by work in the U.S.A. on methods of incorporating latex into bitumen. Further positive results were recorded.

In Australia, a promising new process for preparing a rubber solution for road use from smoked sheet dissolved in power kerosene was developed on an experimental scale.

The report concludes: "Prospects for 1960 appear extremely good. In the United Kingdom rubber has been used in the new Birmingham inner ring road. In New Zealand several installations are projected including the airport at Dunedin, and the Malayan Government has announced its intention of expending approximately £100,000 on rubberising 20 miles of roads."

ROSPA BUILDING SAFETY COURSE

A residential safety training course for safety officers in the building and civil engineering industries will be held from November 13-18, by the Royal Society for the Prevention of Accidents.

Both theoretical and practical aspects will be covered by the course. As well as lectures on safety organisation, causes of accidents, scaffolding, lifting appliances and demolitions, there will be practical lectures on the features of building work which lend themselves to demonstration.

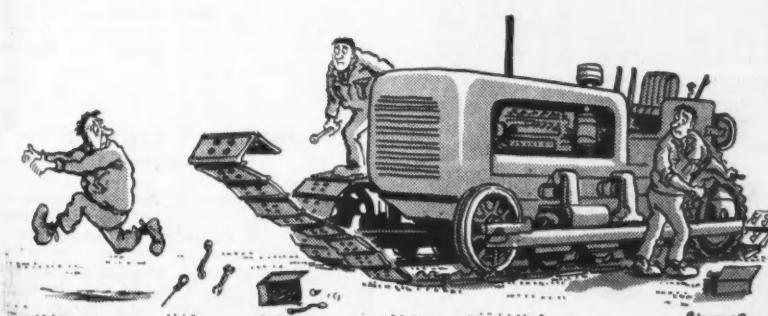
The course will be held at the Civil Defence Staff College at Sunningdale, Berks., and the inclusive fee will be £25.

Enquiries should be made to the Training Officer, Royal Society for the Prevention of Accidents, Industrial Safety Division, Artillery Mansions, 75 Victoria Street, London, S.W.1.

AYLESBURY TO FORM DIRECT LABOUR DEPARTMENT

An assurance that their proposed direct labour department would tender in "fair competition" with private enterprise was given by Aylesbury Housing Committee to a recent deputation from the Aylesbury and District Association of Building Trades Employers.

The Committee told the builders that the results of tendering and the eventual cost of the houses built by direct labour would be made available to the public. They also assured the builders that they had carefully considered all the problems before deciding to embark on a direct labour house-building programme. If, after all costs had been charged against the contract, the Council found that they could not build houses economically, both from the aspect of initial cost and maintenance, the building of houses by direct labour would be discontinued.



International Construction**AUSTRALIAN MARKET FOR BRITISH EXPORTS**

THE economic history of Australia was not uniformly happy in the early 1950's, inflation being one of the chief culprits. Balance of payments difficulties with consequent import restrictions were present until the second half of 1959, when the position was eased. Restrictions were removed from all but about 200 categories and even most of these have qualified for increased quotas.

In this changed situation British exporters are faced with the opportunity not only to increase their sales to Australia but also to recapture that share of the trade which was lost to other suppliers in recent years, states the *G.E.C. Export Gazette*. This will not be easy with competitors ranging from the dollar area to Europe, West Germany in particular, as well as the traditional one, Japan. Textiles are an especially strong Japanese line.

There is, moreover, the alternative course of direct investment in Australia now that it is an expanding market with comparative political stability and security. United Kingdom companies already have over 500 branches and subsidiaries there and Britain is estimated to have supplied £A520m. (63 per cent.) of £A819m. of private foreign capital invested in Australia in the last 12 years, while the United States contributed £A214m. (26 per cent.). There are new opportunities for the British exporter of goods and capital.

FRENCH TO BUILD PERSIAN DAM

A French group comprising the companies, Entreprises de Dragages et de Tavaux Publics and Ets. Billard, have been awarded a \$27m. contract by the Persian Government for the construction of a dam on the Latian river. The dam will take six years to complete and will provide irrigation, power and drinking water for the Teheran area.

NEW ZEALAND MOTORWAY PLAN

THE National Roads Board of New Zealand have accepted, in principle, the need to plan an express motorway into Wellington city, but "much more detailed engineering and economic study must be made including traffic studies."

The Ministry of Works, working with the Wellington City Council's engineering staff, have made preliminary studies of a motorway route from Thorndon to the Basin Reserve via the Tinakori Road area. The Director of Roading, Mr. P. L. Laing, said recently that about 290 houses would be involved in present thinking on the motorway. The acquisition of land would cost about £2m.

An alternative solution of an elevated roadway along the existing quays had been proposed. Overhead roadways, however, had not worked out well. Neither of the schemes could be expected to proceed immediately, but it was important that a decision should be made between them in order that lesser works to give traffic relief over the next eight to 10 years could be intelligently planned, said Mr. Laing.

SOUTH AFRICAN BUILDING PLANS

Plans for proposed building erection, additions and alterations passed by municipalities in the 18 principal urban areas of the Union of South Africa are reported by Barclays Bank D.C.O. to be valued at a slightly higher figure in May than in the previous month.

The Bank adds, however, that the figure is still some £420,000 lower than the best month's total so far this year, i.e., the £5.6m. attained in March. The rise over April levels is confined almost entirely to plans passed for flats and other dwellings, excluding houses.

The May total of £5.2m. is stated by the Bank to bring the total of building plans passed for the first five months of the year to £24.8m., against the £24.1m. in the corresponding period of 1959.

CANADIAN HEAD OFFICE CONTRACT

TAYLOR WOODROW (CANADA), LTD., have been awarded a contract valued at over \$900,000 (about £325,000) for a new head office building for the Ontario Hospital Association, at Flemingdon Park, North York, near Toronto.

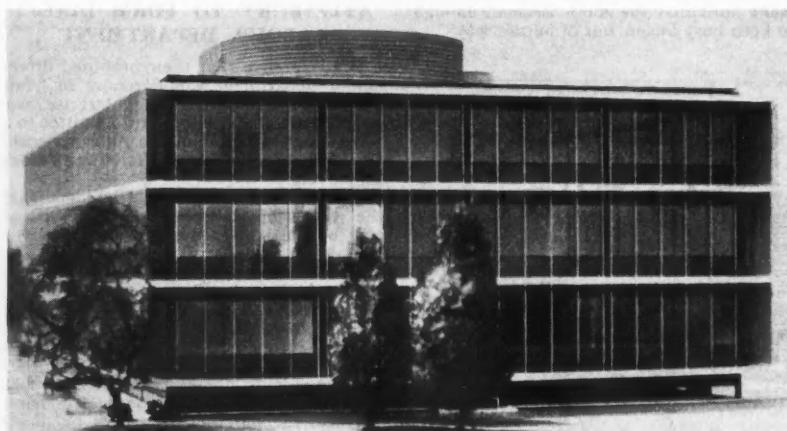
The building, in three storeys and basement (with parking area for about 50 cars), will have a structural steel frame, 147ft. by 88ft. with precast concrete floors and roof slab, and metal external curtain walling. Floors will be finished with vinyl tiles,

and ceilings will be of suspended acoustical tiling.

Oil-fired furnaces are to provide the heating and an air-conditioning system will be installed throughout.

The architects are Peter Dickinson Associates and the engineers, Giffels and Vallet of Canada, Ltd.

The photograph shows an impression of the building as it will appear on completion, by the end of the year.

**BUILDING BLOCKS MADE FROM SOIL**

Officials of the Western Nigerian Government recently attended a demonstration in Ibadan of a small portable machine for making cheap building blocks from local soil or from moistened rubble from demolished mud houses and a small proportion of cement.

The machine is made by the Ibex Housing Corporation of South America and is called the Cinva-Ram. It is expected to retail in the region for about £50.

The aim of introducing the machine into Western Nigeria is to establish small local industries which will provide stronger and cheaper building materials, using local materials, for the rural areas. The Cinva-Ram is operated by four men and can produce 600 building blocks in a normal working day at the cost of a half-penny each, including labour and cement. It is estimated that about 5,000 blocks are required to build a normal four-roomed house in Western Nigeria.

MINE SHAFT CONTRACT IN SOUTH AFRICA

The Cementation Co. (Africa) (Pty.), Ltd., have been awarded the first contract for shaft sinking to be given to an outside contractor in the history of South African mining.

The mine concerned belongs to O'Ikiep Copper Co. in Namaqualand, Cape Province. A 17ft. diameter ventilation shaft has now been completed to a depth of 1,987ft., and on August 1, the main shaft will be started. This will be 20ft. finished diameter, fully concrete lined from surface to 3,000ft.

AUSTRALIAN WHARF PROJECT

London consulting engineers, G. Mausell and Partners, have put forward a novel plan for the construction of the main wharves for the proposed deep water port at Broome, on the north-west corner of Western Australia.

In a report submitted to the State Government, they propose that concrete boxes, 140ft. long, 40ft. wide and 35ft. deep, and weighing 2,400 tons each, should be made at Fremantle and towed the 1,300 miles to Broome. Five would be needed for the main wharf and three for the basin. The report says towage costs would be reasonable.

PORtUGUESE PULP MILL

A second pulp mill for the Caima Pulp Co., Ltd., of Oporto is under construction at Constancia in the south of Portugal. It is being planned and co-ordinated by Boving and Co., Ltd., London, who are also supplying the pulp process machinery.

The boiler plant is being supplied by Babcock and Wilcox, Ltd., and the electrical generating plant and power distribution is being carried out by A.E.I. Export, Ltd. Initially the mill will produce 20,000 tons of easy bleaching sulphite eucalyptus pulp a year, but there are plans for a later extension which will more than double this capacity.

RHODESIAN COLLEGE EXTENSIONS

A grant of £344,750 has been made to the University College of Rhodesia and Nyasaland for extending its accommodation for both men and women. The grant is the first due under the further allocation of £1.4m. by Colonial Development and Welfare funds, announced last October.

Trade Section

JOHN ALLEN INTRODUCE SMALL U.S. TRENCHER

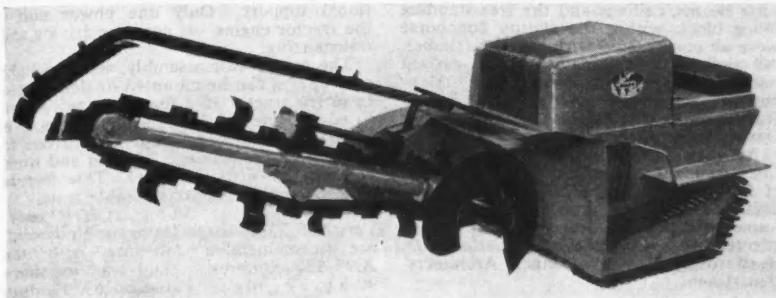
A SMALL trencher and backfiller of American origin, capable of digging trenches from widths of 3in. to 12in. to depths varying from 5ft. 6in. to 2ft. 6in., is now being sold in this country by John Allen and Sons (Oxford), Ltd., Cowley, Oxford.

Known as the Allen 3/12 Trencher, the machine is powered by a 12½-h.p. air-cooled four-stroke engine equipped with a 12-volt electric starter.

All controls are grouped within reach of

The digging chain is V-belt driven, and engaged by spring-loaded idler in the on and off positions. Teeth are made from heat-treated alloy steel, and combinations of teeth and teeth-brackets enable trenches of all widths from 3in. to 12in. to be dug. A pre-loaded shock absorber device is incorporated in the boom, which cushions the shocks encountered while digging without loss of power. The digging boom is controlled hydraulically, and can be telescoped to suit depth of trench.

Spoil is deposited from the digging boom



3/12 Allen trencher and backfiller

the operator from the padded seat. The drive mechanism is a one-piece unit, with hardened gears and heavy-duty bearings used throughout, and a two-speed reduction unit gives trenching speeds from 1ft. to 12ft. per minute, with a top speed of up to 2 m.p.h. for travelling or bulldozing.

Independent drive clutches and disc steering brakes are incorporated for each track, with instant forward and reverse by hydraulic power from a valve on the control panel. Weight distribution on the tracks gives a ground pressure of only 3.3lb. per sq. in., enabling the machine to negotiate soft going.

on to an auger, which rotates with a spiral motion to discharge on the left-hand side of the machine. A sweep blade is mounted on the right, to leave a clean surface adjacent to the trench.

A specially designed backfiller blade is available, which can be set straight, or angled to the left, by a pin setting. Blade raising and lowering is hydraulically controlled.

The machine is 3ft. 1in. high from ground level to the top of the hood and is 3ft. 1in. wide. To the front of the auger the overall length is 6ft. 4½in., and the weight is 1,350lb.

SHORTAGE OF TIPPERS IN CENTRAL SCOTLAND

From Our Scottish Correspondent

THE extensive development work in Lanarkshire, including the new strip mill and other steel industry developments, has resulted in an acute shortage of tipping fleets in that part of Scotland. Contractors who specialise in this work are now re-organising and developing their fleets and are generally receiving approval for such moves. The situation is such that a considerable number of large-scale projects are short of plant and that all contractors in this sphere have more work than they can handle.

Applications have been heard by the Scottish Licensing Authority to increase the numbers of vehicles available and in general these are being granted. At Glasgow recently, Bernard Brogan, Ltd., of Motherwell, one specialist in site work, was granted a new licence covering six extra vehicles of 25½ tons to be employed on sites within 35 miles of base as a method of meeting the shortage. Mr. James Brogan, a director of the applicant firm, said that all the tipping fleets in this area were very fully employed and that subcontracting had become even more difficult than before. They themselves received numerous applications for assistance from other tipping fleet owners but were quite unable to assist. Mr. W. Quin, Scottish Licensing Authority, granted the application on the grounds of shortage of tippers in their area and the fact that an excessive amount of work was developing which could not be handled by the existing fleets.

This situation indicates the very strong contracting and constructional situation in Central Scotland arising from major projects such as Colvilles strip mill, the British Motor Corporation project and many other smaller but still considerable undertakings now in progress in the area.

AUTOMATIC VERTICAL WELDING PROCESS

Rockweld, Ltd., Commerce Way, Croydon, Surrey, are to introduce into this country the Comatic automatic process for the vertical welding of thin plates in mild and low alloy steels. It will weld plates down to ¼in. thick.

The principle of operation is that the wire and parent plate are melted by an arc, the weld being protected by CO₂ gas. The molten weld metal is contained by water-cooled copper shoes, located on opposite faces of the plate being welded and traversing upwards as welding proceeds.

The machine consists of a vertical frame with two tracks which carry the welding head carriage. This carriage is equipped with a wire feed roll drive, a wire drum, a vertical traverse drive mechanism, an adjustable wire guide oscillation device, and fixtures for carrying the copper shoes. Controls and meters are incorporated in a cabinet attached on top of the carriage. The column, which is fitted with a lifting lug at the top, clamps directly onto the workpiece which itself supports the frame.

In operation, the CO₂ arc gives the necessary side wall penetration with a small gap. When thin plates are being welded the wire is fed in centrally between the plates; for heavier plates the wire is made to oscillate across the thickness of the material.

The power requirement is a standard, drooping characteristic, welding generator or transformer/rectifier equipment of similar characteristic fitted with current control only, arc voltage control being fitted to the welding. The welding generator or transformer/rectifier is rated at 750 amps for continuous duty.

SYKES ANNOUNCE TRAILER-MOUNTED UNIVAC PUMP

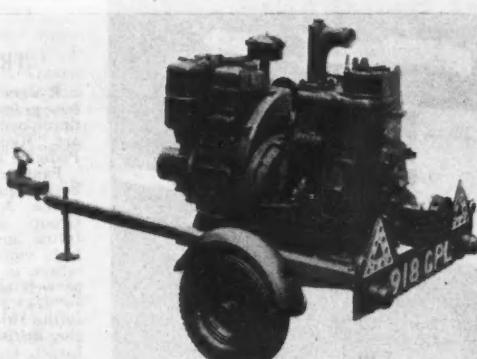
A TRAILER-MOUNTED version of their standard UVS2 Univac pump has been introduced by Henry Sykes, Ltd., 53b Southwark Street, London, S.E.1.

The UVS2 is a 3/3.5-h.p. diesel powered self-priming centrifugal pump which incorporates a rotary vacuum pump in its design, thus enabling it to pump on snore at a maximum suction lift of 26/28ft. It is suitable for operating a small well-point dewatering system in addition to handling free-flowing slurries containing up to 1in. diameter solids and for use where instantaneous self-priming is required.

The output of the pump at 1,500 r.p.m. is 8,000 g.p.h., at a total head from all causes of 20ft., the output at 39ft. being 3,000 g.p.h. The pump is close coupled to an air-cooled, four-stroke, direct injection Lister LD1 diesel engine which develops 3 b.h.p. at 1,500 r.p.m. and 3.5 b.h.p. at 1,800 r.p.m.

A rigid bedplate has been fitted for the new trailer mounting, allowing the pump

to be detached and manhandled into confined spaces. The suspension of the trailer unit is by means of independent rubber torsion bars and the wheels are fitted with 16in. by 4in. pneumatic tyres. The towing bar is fitted with a 2in. ball-type coupling and a simple jack stand. Rubber mudguards are fitted. The complete unit has an overall length of 7ft., a width of 3ft. 8in. and a height of 3ft. 8in.



The trailer-mounted Univac

Trade Section

DEMAND FOR BRITISH COLUMBIA TIMBERS IN BRITAIN

From a Correspondent

AGAINST the background of industrial expansion and accelerating housing activity, which together promise a record post-war level for softwood consumption this year, imports of British Columbia timbers are expected to be about 100,000 standards heavier than in 1959. Winter and spring shipments from the Pacific Coast showed a marked improvement and are now helping to fill gaps which have appeared in the country's stocks.

Douglas fir still takes first place among Canada's deliveries, but in recent months British importers have shown keen interest in Pacific Coast hemlock, both sawn stock and building timber surfaced to Canadian Lumber Standards (C.L.S.). Trade in Western red cedar, British Columbia's other major export, exhibits a vigour all its own and consumption is steadily increasing. Last year saw the highest ever import of cedar from British Columbia. Present indications are that there will be a further increase of 50 per cent. this year over the 1959 figure. Popular uses for cedar include greenhouses, toolsheds, summerhouses, exterior cladding for homes and schools, shop-fronts, door core-stock, fencing and panelling.

Timber Engineering

Douglas fir continues to occupy a prominent position in large-scale timber engineering, and is used more widely than any other timber for glued laminated construction. A report recently received by the B.C.L.M.A. from Kingston (Architectural Craftsmen), Ltd., one of the leading concerns in this field, indicates that Douglas fir has been used in carrying out some 400 contracts involving the use of glued laminated timbers.

Among the more interesting contracts recently executed by this Hull enterprise is a new electricity depot for British Railways at Manchester. This project called

for the fabrication and erection of the entire timber framework for a maintenance shed, stores and workshops. Glu-lam work covered the production of 23 arches and five beams of Douglas fir.

Hemlock

Pacific Coast hemlock has been used extensively in the construction of the conoid shell roof for the new Oxford Road Station at Manchester. Glued laminated edge beams, ceilings and the free-standing office block within the station concourse were all constructed with this B.C. timber. All timber engineering work was carried out by Tinker and Young, Ltd., Manchester, to designs prepared by British Railways in collaboration with the Timber Development Association.

Another impressive application of Pacific Coast hemlock is the newly completed roof of Roebuck Infants' School at Stevenage. This takes the form of wide-spanning space frames designed by Simon Woolf, T.D.A. engineering consultant, in association with Hertfordshire County Council Architects' Department.

"American Line" Homes

Cedar Homes, Ltd., of Guildford, Surrey, who in recent years have employed considerable quantities of Western red cedar and C.L.S. hemlock in the manufacture of timber-framed homes, have now introduced a new range of brick veneer bungalows representing English adaptations of American housing styles. Features of the "Long Island" bungalow, the first in the firm's "American Line" series, include a low pitched roof with wide overhang at the eaves and verge and the harmonious blending of brick and timber. Later models will adopt other American place names. All models are being designed by Scott, Brownrigg and Turner, of London and Guildford, and B.C. timber (Western red cedar and pressure-treated C.L.S. hemlock) is being used throughout for the load-bearing framework.

ABELSON IMPORT DANISH AIR COMPRESSORS

TWO Danish tractor link mounted 2- and 3-tool air compressors have recently been imported into the United Kingdom by Abelson and Co. (Engineers), Ltd., Sheldon, Birmingham, 26.

Known as the Hydor Models A.95/132 and A.105/B.145, they are offered in self-contained packs which are suitable for mounting with universal adaptor brackets onto any conventional wheeled or crawler tractor having rear power take-off drive and normal three-point linkage with hydraulic control.

The compressors are supplied with telescopic P.T.O. propeller shaft with universal couplings at each end, air receiver assembly and all necessary fittings, and mounted into an all-steel frame with four tubular legs which can be adjusted for free standing without additional support. Only one power unit—the tractor engine—is used for driving and transporting.

The compressor assembly, which weighs only 882lb., can be mounted or demounted from the tractor in a few minutes. When fitted to the tractor the compressor is lifted clear of the ground and driven to site, where the frame is lowered and work commenced without delay. This feature it is claimed saves considerable time.

Tractors up to 40-h.p., i.e., Massey-Ferguson 35, Fordson Dexta, or equivalent, are recommended for use with the A.95/132 compressor, and tractors above 40-h.p., i.e., Massey-Ferguson 65, Fordson Power Major, or equivalent, for use with the A.105/B.145 compressor. Both compressors, which are of the single stage, six-cylinder, air-cooled reciprocating type, are designed to give a maximum output at 750 r.p.m.

Comparative Field Tests

During recent comparative field tests it is stated that the A.95/132 effectively maintained 98lb. p.s.i. working pressure whilst driving two heavy-duty concrete breakers over a sustained period. At the same time the A.105/B.145 operated three identical heavy-duty concrete breakers at 95lb. p.s.i. working pressure.

The compressors are priced at £395 and £450 ex works, respectively.

STEELWORKS CONTRACT FOR POWELL DUFFRYN

Powell Duffryn Engineering Co., Ltd., Cardiff, have been awarded a £300,000 contract by Richard Thomas and Baldwins for the provision of site workshop and general miscellaneous engineering services at the new Spencer Works, Llanwern.

The contract includes the provision and maintenance during the whole of the building and commissioning period of the following services: a fully equipped site workshop; a construction and erection labour force; plate and section material stocks; static and mobile welding plant; mobile crane and other heavy duty lifting and transport plant.

TRADE NEWS IN BRIEF

Ryders of St. Albans are introducing two new grass mixtures which have been specially developed for parks and sports fields. They are "Ryders Pedigree + Plus" and "Ryders Pedigree Greensward."

Panther Ceilings, Ltd., Manchester, have been acquired by Ayrshire Dockyard Co., Ltd., Irvine, Ayrshire, a member of the Lithgow Group. The ceilings will be manufactured at Irvine and the subsidiary, Panther Ceilings, Ltd., will form the selling organisation with offices in London, Birmingham and Canada, as well as at Irvine and St. Helens.

"Dense Tar Surfacing—Guide to Laying" is the title of a new pocket folder issued by the British Road Tar Association, 9 Harley Street, London, W.I.

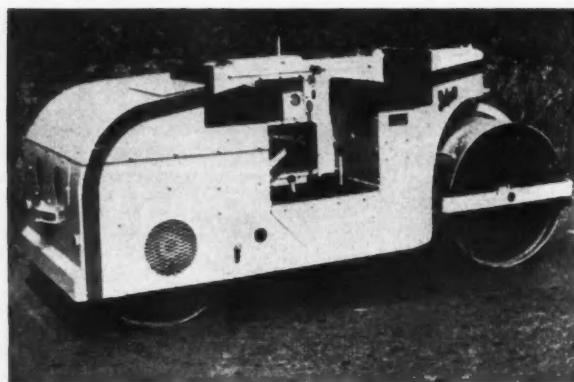
The address of the Scottish Association of Paint Manufacturers is now 128 Hope Street, Glasgow, C.2. Tel: Central 6434-5.

TANDEM ROLLERS WILL WORK ON

1-IN-4 SLOPE

A CONTINENTAL vibrating roller which, it is claimed, will work on gradients of up to 1-in-4, is now available in this country. C.E.T. (Equipment), Ltd., Burlington Works, Abbey Road, London, N.W.10, have been appointed the sole agents for the machine—the Scheid tandem roller.

There are two models of the machine—type 20.0, which has a working weight of 4,400lb., and a rolling width of 35½in.; and type 25.0 with a working weight of 9,500lb. and a rolling width of 43in. With water ballast, working weights are increased to 5,000lb. and 11,000lb. respectively.



Scheid tandem roller

Trade Section

ASPERA RANGE OF PETROL ENGINES

28 Different Types Introduced to U.K. Market

A COMPREHENSIVE range of air-cooled, single cylinder, two- and four-stroke petrol engines of 1 to 6 horsepower, manufactured by Aspera Motors of Turin, are now being introduced to the United Kingdom market by Mackay Industrial Equipment, Ltd., of Feltham, Middlesex.

There are 28 different types included in the range, of which 16 are four-stroke and the remainder two-stroke. In the four-stroke range of engines, from 2½-h.p. to 3½-h.p., each can be supplied with vertical or horizontal crankshafts and, where re-

seats can be reground. Good cooling is provided by the combination of a flywheel fan and deeply finned aluminium cylinder block.

Operating Angle

The use of a diaphragm type carburettor enables all the four-stroke engines to work at angles which are limited only by the level of the oil in the crankcase. These four-stroke engines can operate continuously at angles, according to the plane of tilting, of up to 60 degrees and, in some cases, 87 degrees. In the case of the two-stroke engines which are also fitted with the diaphragm type carburettor, operation can be in any position, even upside down.

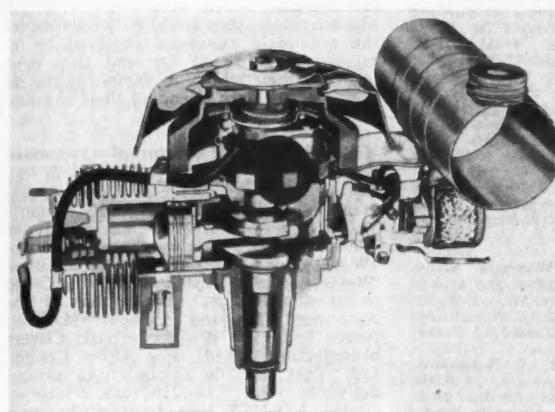
The vertical crankshaft four-stroke engines have forced feed lubrication by a positive displacement pump operated by an eccentric on the cam-shaft.

With the exception of the AH.47 and AH.81 series, all the engines have mechanical centrifugal governors which ensure immediate response to load variations so that the engine maintains a constant speed. The governor fulfils the requirements of B.S. 765: 1938.

A high tension magneto fitted with a

dust and moisture proof moulded coil ensures a hot spark giving instant starting under all conditions.

The Aspera engines are being built, under licence from the United States, in a modern £3m. factory in the Mirafiori district of Turin, the most up-to-date mass production techniques being employed. Much attention has been made to the selection of the machine tools, many of them coming from Great Britain, in particular, the very fine honing machines. The grinding machines are electronically controlled and work to a tolerance of 1/1,000th of one millimetre, automatically rejecting parts which do not conform to this standard. In their pre-planning, Aspera decided that every machine tool would be replaced within a five-year period as they consider that with the rapid evolution in changing techniques, every machine tool is superseded by a better or more economic unit within five years.



Cross-section of Aspera 2-stroke engine

quired, with special ball-bearing crank-shaft support. The two-stroke engines from 2½-h.p. to 6-h.p. can likewise be supplied with vertical or horizontal crankshafts and with a number of variations for special applications.

Light and Compact

Full use is made of die-cast aluminium alloys in manufacture which enable an extremely lightweight engine to be produced. The minimum amount of space is taken up and all components and assemblies have been streamlined.

Where maximum wear takes place, special cast-iron inserts are integrally cast with the aluminium alloy, i.e., cylinder liners, valve seats and guides. The liner is sufficiently thick to allow for two rebore and oversize pistons and rings are standard spare parts. Valve guides can be reamed and valves with oversize stems are also available as standard spare parts. Valve

REINFORCING BARS—CUT AND BENT

Industrial Speciality (Iron and Steel), Ltd., 18 Buckingham Gate, London, S.W.1, announce that due to special arrangements they can offer reinforcing bars (conforming to B.S.S. 785) in diameters ¼ in. and up, cut and bent according to requirements. Delivery within 72 hours is quoted for sites in the London area.

PORTRABLE CONCRETE TESTER

A new portable concrete tester has been developed to perform compressive strength tests on 6in. diameter concrete cylinders or concrete cubes up to 16.5 centimetres. It has a load capacity of 250,000lb. is only 38in. high and weighs 480lb.

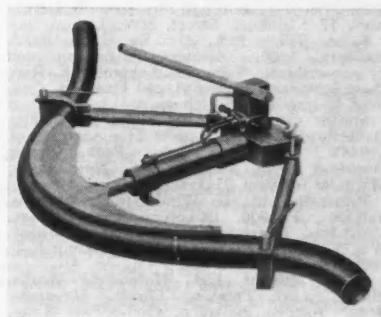
Further details are available from Soil-test International S.A., Technical Office, 177 Avenue Louise, Brussels, 5, Belgium.

HYDRAULICALLY OPERATED PIPE BENDER

A LIGHTWEIGHT, two-stage hydraulic unit for bending tubes or pipes on site has been introduced by Chamberlain Industries, Ltd., Staffa Works, Argall Avenue, London, E.10.

Instead of the normal heavy beam or winghead the machine has hinged arms which fold to make a compact, portable unit. Two sizes are available for bending pipe from 2in. to 4in. bore, or from 4in. to 8in.

The machine, known as the Field bender,



The Field bender

is composed of a Staffa hydraulic ram to the base of which is attached the oil reservoir and arm trunnion brackets. The arms which carry the pipe clamps are telescopic and are positioned by means of a pin.

A weatherproof pump unit is mounted on top of the tank. This has two pistons to give fast approach for rapid bending of light tubes. For bending to maximum capacity, the physical effort is reduced by by-passing one of the cylinders.

A four-way valve permits powered automatic withdrawal of the ram to free the former from the workpiece. The pump is fully protected from overload by a built-in pressure relief valve, and the pump body is internally drained back to the tank to eliminate external leaks. Formers enable pipe of 2in., 2½in., 3in. and 4in. nominal bore to be bent in one operation up to an angle of 90 degrees, without heating or filling and also without removing the pipe from the former.

DISPOSAL OF MIDDLESBROUGH IRONWORKS

A contract has been awarded to George Cohen, Sons and Co., Ltd., for the dismantling and disposal of the plant and buildings of the former Normanby Ironworks, Middlesbrough.

The task of dismantling the three blast furnaces, continuous pig plant, chimneys, gas washers and other plant amounting to almost 9,000 tons has already begun and George Cohen's Raw Materials Division expects to complete the work within 12 months. Some 13,000 cu. yd. of brickwork is also involved.

CABS FOR MASSEY FERGUSON MACHINES

To the "Sta-Dri" range of equipment made by Bristol Metal Components, Ltd., Whitefield Road, Bristol 5, has been added a tractor cab and digger cab for the Massey Ferguson 702, 710 digger equipment.

These cabs have removable glass fibre roofs, lift-on-and-off type doors and full vision backcloth, and are of sectional construction. The price of the cab for the 702 loader is £60 and for the 710 digger, £51 17s. 6d., both ex works.

ABELSON DISTRIBUTORS FOR JOHN DEERE EQUIPMENT

Abelson and Co. (Engineers), Ltd., Sheldon, Birmingham, have been appointed distributors for the sale of John Deere earthmoving equipment, including the model 831 ½ cu. yd. crawler shovel-model 51 hydraulic trencher and the model 440 diesel crawler tractor with hydraulic angle-dozer and ancillary attachments.

Abelson and Co. will also offer John Deere equipments for hire.

CAPS FOR VIBRATORS

The Consolidated Pneumatic Tool Co., Ltd., have recently introduced two sizes of rubber caps to fit their models 325 and 5180 poker vibrators respectively. The caps are of thick moulded rubber and have been designed to absorb the major portion of blows arising from striking solid objects.

Trade Section

NEW COMPANIES

The undermentioned particulars of new companies recently registered are taken from the daily register compiled by Jordan and Sons, Ltd., company registration agents, 116 Chancery Lane, London, W.C.2:-

Rowlands Builders (Hants), Ltd., 10 South Pallant, Chichester. £100. Permanent directors: John F. Cooper, Victoria Place, Victoria Road North, Portsmouth; John Hooper, 269 Chichester Road, Portsmouth.

C. Devenport, Ltd., builders. £100. Directors: Cyril Devenport and Mrs. Joyce B. Devenport, 17 Slaidburn Street, S.W.10.

R. A. Tiller, Ltd., 23-5 Eastcheap, E.C.3, builders. £100. Directors: To be appointed by subscribers. Subscribers: Stanley E. Renshaw (company secretary) and Frank H. Coxhead (clerk), 23-5 Eastcheap, E.C.3.

Sheehy Contractors, Ltd., Four Lane Ends, Oakerthorpe, Derbyshire, plant hire contractors. £10,000. Directors: John Peck, Lower Dunstead Road, Langley Mill, Nottingham; Margaret Johnson, 25 Oakland Street, Alfreton.

Pemcrete, Ltd., 66 Wind Street, Swansea, builders. £10,000. Directors: Roger Gibson, Longsdon, Uzmaston Road, Haverfordwest; Wm. King, The Pines, Gowerton, Glam.; J. T. Jones and Clifford Locke.

Pilling Precast, Ltd., Holmefield Works, Pilling, near Preston. £1,000. Directors: Norah Aspden, Balladon, Horse Park Lane, Pilling, near Preston; Michael Aspden, 10 Maple Drive, Poulton le Fylde.

Williams Bros. (Carshalton), Ltd., 66 Silver Street, Enfield, builders. £1,000. Directors: Alfred V. G. East, Henleys, Dartford Road, Bexley; Stanley T. East, 60 Campbell Road, Gravesend; Thomas A. Williams and Phyllis S. Bradshaw.

Chival, Ltd., 134 Ruxley Lane, West Ewell, Surrey, building contractors. £100. Directors: Charles H. Body, 7 Church Rise, Forest Hill, S.E.23; Allan Eshelby, 134 Ruxley Lane, West Ewell, Surrey; Victor Poole, 66 Willingdon Avenue, Hollington, St. Leonards-on-Sea, Sussex.

Ipswich Associated Builders, Ltd., 3 Pelham's Lane, Colchester, Essex. £25,000. Directors: Not named. Subscribers: Herbert G. S. Kenney, Berryhill, Burstable, near Ipswich (company director); Walter A. Hardy, Foxhall Lane, Foxhall, Suffolk (company director); Leonard D. Bloom, 5 St. Johns Road, Ipswich.

Minster Plant Hire, Ltd., 9 Minster Yard, York. £1,000. Directors: Mrs. Amy Chapman, 5 Driffield Terrace, York; Mrs. Mary Woolley, 22 Foxhill, Wetherby.

C. Harrison (Builders), Ltd. £5,000. Directors: Christopher Harris and Norah Harris, addresses not stated. Subscribers: Ian M. Chapman, The Shelling, Wolfiston, Billingham, Co. Durham (solicitor); Clifford Weatheras, 48 Winifred Street, Fulwell, Sunderland (company secretary).

Bever Construction Co., Ltd., builders. £100. Directors: Not named. Subscribers: Dorothy M. Graeme (company director) and Gordon V. Graeme (barrister), 61 Fairview Avenue, Gillingham, Kent.

W. Czerniuk and Co., Ltd., 22 Burns Street, Chadmoor, Cannock, building and civil engineering contractors. £2,000. Permanent directors: Wladzimierz Czerniuk and Mrs. June M. Czerniuk, 22 Burns Street, Chadmoor, Cannock.

Harry Hawkins, Ltd., 146 Strouden Road, Bournemouth, builders. £1,500. Director: Harold J. Hawkins, 1040 Wimborne Road, Bournemouth.

John McCormick (Rochdale), Ltd., builders. £600. Directors: To be appointed by subscribers. Subscribers: John McCormick, 18 Samson Street, Rochdale; Donald S. Lomax, 69 Cawthron Avenue, Harrogate.

Powerscroft Developments, Ltd., builders. £100. Directors: Arthur R. Rackham and Mrs. B. M. Rackham, Powerscroft, Saffrons Road, Eastbourne.

Torfield Court (Developments), Ltd., builders. £100. Directors: To be appointed by subscribers. Subscribers: Stanley H. Lucas and Francis A. Dean, 6 Surrey Street, W.C.2.

Economic Constructions, Ltd., 77 Portland Place, W.1, building contractors. £100. Directors: Peter J. Scaramanga, 9 Margaret Terrace, S.W.3; Mrs. Patricia J. Martin, 22 Stanstead Crescent, South Woodingdean, Brighton.

Egham Builders (Contracting), Ltd., 8 Fulwood Place, W.C.1. £100. Directors: Francis C. Wilkins, Elm Cottage, Folders Lane, Bracknell, Berks; Derek W. Gillett, 10 Linden Hill Road, Bracknell, Berks.

William J. Bray, Ltd., 23 Picton Street, Bristol, 6, builders and contractors. £2,000. Directors: William J. Bray (permanent) and Gwendoline B. Bray, The Priory, Abbotts Leigh, near Bristol.

Velder Roads, Ltd., 106 Worcester Street, Stourbridge, W.1, tarmacadam and asphalt contractors. £1,000. Directors: Michael Darby, 7 Birchfield Road, Wollescote, Stourbridge (permanent); Patricia A. Millward, 2 Stoney Lane, Netherton, Dudley.

Neodox Contractors, Ltd., 7 Brazennose Street, Manchester, 2, builders. £20,000. Directors: Ronald M. Foster, Motley Bank, South Downs Road, Bowdon; Alfred W. White, Crantock, Carr Wood, Hale, Barns; Eric L. Gosling, William G. Haig, Ernest H. Smeaton, Stanley White, and William F. Williams.

Ashford (London), Ltd., 10 Coram Street, W.C.1, builders. £100. Directors: To be appointed by subscribers. Subscribers: Ann E. Lawrence, 362a Bowes Road, N.11 (typist); E. M. Edwards, 3 Bath Road, W.5 (secretary).

Lindum Construction Co., Ltd., public works contractors. £5,000. Directors: John F. Chambers, Northgate, Washington Road, Heighington, Lincoln; Anthony J. Neary, 1 Park Avenue, Hartsholme Estate, Lincoln.

Stamford Asphalt Co., Ltd., 38 Great Portland Street, W.1. £1,000. Directors: Andrew M. J. Mari, 2 Temple Terrace, Vincent Road, N.22; Vincent C. Mari, 6 Linthorpe Road, Stamford Hill, N.16.

Stanleys (Builders), Ltd., The Poplars, Dunball, near Bridgwater, Som. £6,000. Directors: Stanley Grant, The Poplars, Dunball, near Bridgwater, Som.; Stanley J. Coram, 31 Taunton Road, Bridgwater.

News from the Boardroom

POST-WAR changes in the availability and price of coal have had a severe impact on the gas industry, so much so that it is being compelled by the mere struggle for survival to exploit other means of gas production. How is this trend affecting the tar distillers? In his statement presented at the recent annual meeting of the Midland Tar Distillers, Ltd., Mr. R. B. Robinson, chairman, said it was certainly true that their supplies of crude tar had now passed their peak. Nonetheless, they expected to continue to receive supplies at something like the present rate from a number of orthodox carbonising plants which would continue to process coal for a long time to come. The new methods of gas production would undoubtedly make headway, but as far as they were concerned they did not expect the effect to be as large as it might be in other areas. Faced with a supply of raw material which was, to put it at the highest, static, they could no longer expect the automatic expansion involved by increasing supplies of tar and they must intensify their efforts in exploiting the tar they had got and extending their chemical manufacturing interests.

THE Blue Circle Group of Companies, the largest cement organisation in the world, is facing the biggest expansion programme in its history in this country. Their target is to increase output by 1,000,000 tons a year by the early part of 1963. This statement is made in a "Review of 1959" distributed by the Group to all employees and shareholders of The Associated Portland Cement Manufacturers, Ltd., The British Portland Cement Manufacturers, Ltd., and Alpha Cement, Ltd. Last year, the Group's total cement deliveries were 9,904,218 tons, which included 2,262,013 tons from works overseas in which it is interested. Some interesting data relating to ancillary products supplied from the Group's home works during 1959 is given—over 752,000 tons of white, coloured and special cements, lime and lime-based products and whiting. Approximately 117m. bags were made at Blue Circle works—despite the fact that 33½% of the home trade tonnage of cement was delivered in bulk, for which no bags are required.

THE success of wellpointing in many parts of the world was referred to by the directors of Millars' Machinery Co., Ltd., at their recent annual general meeting. In this connection, the company have registered a new subsidiary in Italy, which operates from Milan in the hire of Millars' Wellpoint Dewatering Equipment. During the first few months of operation, this new venture has shown a satisfactory return on the capital employed. The turnover of Millars' Machinery Co., after showing a small decline at the beginning of 1959, picked up for the remainder of the year, resulting in an increase in turnover and profits, and this has since been maintained.

MR. DARBY HADDON, chairman, W. H. Dorman and Co., reports that an increasing world-wide demand for their engines has overtaken manufacturing capacity in some departments. Production difficulties arising, and not the order book, is the present limiting factor. Net profits for the past year £94,985 (£37,388); dividend is doubled at 4d. per 2s. share.

WARD'S NEW DUMP TRUCK

Production has just begun on the Douglas 22-ton dump truck which is to be shown at the forthcoming Public Works Exhibition, Olympia, by Thos. W. Ward, Ltd. Powered by a Cummins NT-6 diesel engine developing maximum power of 250 b.h.p. at 2,100 r.p.m. it has a maximum speed of 25 m.p.h. (at 34 tons gross) and 35 m.p.h. (light). Angle of tip is 70 degrees.



The first Case crawler tractor to be delivered in Yorkshire, the 800 crawler shovel, is seen here working on the construction of the Wentbridge viaduct and by-pass on the A.1, 12 miles north of Doncaster. This is a £750,000 Taylor Woodrow Construction, Ltd., contract awarded by the Ministry of Transport (Agent-Authority West Riding County Council), and is due to be completed by the end of September, 1961.

Current Constructional Activities

PROJECTS • CONTRACTS • AWARDS

THIS editorial feature provides readers with a comprehensive news service covering forthcoming private and public construction work. Commencing on this page information is given concerning future projects followed by details of tenders being invited. In the third section will be found news of tenders recommended for acceptance, tenders accepted and contracts awarded. Attention is also drawn to the advertisements covering contracts and appointments appearing in the front part of the *Journal*.

BUILDING AND DECORATING (See also Housing Schemes)

Ayr.—Dean of Guild Court have approved the following: Erection of a bowling pavilion at Leslie Crescent for B.C. (estimated cost £4,000); garage salerooms and office for A. and D. Fraser, Ltd., 38 Fort Street (£3,500); alterations for a loading bay and new processing machinery for McGill and Smith, Ltd., York Street Lane (£1,000).

Barnes, Surrey.—Co. E.C. recommended to approve scheme for new metalwork room, canteen, store, etc., at Barnes County Boys' School. Estimated cost £4,110.

Barrow-in-Furness, Lancs.—B.C. recommended to approve scheme for remodelling of the St. James's C. of E. Junior School. Estimated cost £19,885.

Basingstoke, Hants.—Co. E.C. have approved the provision of assembly hall, boilerhouse, stores and services at Worting County Primary School. Estimated cost £14,920.

Battersea.—B.C. recommended to approve development of Lavender Hill site No. 1 for proposed civic centre in accordance with preliminary plans submitted by Howes and Jackson, architects, 1 Verulam Buildings, London, W.C.1. Estimated cost £115,000.

Bedlington, Northumb.—Thermalite Ytong, Ltd., London, Subsidiary of John Laing and Sons, Ltd., are to erect a factory at Cambios. Plans submitted to the C.C. for approval.

Berwick, Northumb.—T. Barrett, Sons and Partners, High Bridge, Newcastle upon Tyne, have been appointed quantity surveyors for a ward block at Berwick Infirmary. Plans are by P. H. Knighton, chief architect.

B.C. to build shops and flats at Walkergate. **Berwick, Northumb.**—Barrett, Sons and Partners, High Bridge, Newcastle upon Tyne, have been appointed quantity surveyors by Newcastle Regional Hospital Board for the erection of a new ward block at Berwick Infirmary. P. H. Knighton, chief architect.

Bethnal Green.—L.C.C. approved a scheme for the adaptation and extension of Daneford Secondary School. Estimated cost £371,520.

Bexley, Kent.—B.C. recommended to prepare detailed plans for the construction of proposed covered swimming baths at Crook Log.

Billeshall, Dur.—Imperial Chemical Industries, Ltd., are to erect drawing offices of about 28,000 sq. ft. and laboratory 40,000 sq. ft.) at their Billingham Works.

U.D.C. recommended to complete its scheme for a large new shopping centre, within five years instead of 10. The scheme includes multi-level shops, civic hall, theatre, swimming baths, skating rink and museum. There will also be nearby parking accommodation for 1,000 cars. The consultant architect concerned with the scheme is A. J. Elder, Midland Bank Chambers, Town Square, Billingham-on-Tees.

Bilston, Staffs.—B.C. recommended to approve scheme for an indoor swimming bath at Prouds Lane. Estimated cost £208,500.

Birmingham.—J. E. G. Edwards, 68 High Street, Harborne, is the architect for industrial premises in Smith Street, Newtown redevelopment area, for B. H. Britton and Sons, Ltd. Scheme in its very early stages.

Bishop's Stortford, Herts.—U.D.C. to prepare sketch details for the construction of a covered heated bath and an open-air unheated bath.

Blackburn, Lancs.—Borough Engineer to prepare a scheme for erection of two additional classrooms at Shadsworth Secondary School.

Bournemouth, Hants.—Ministry have approved the erection of a factory at Wallisdown Road for D. Drake and Sons, Cromwell Road, Southbourne.

Bradford, Yorks.—City Council preparing plans for erection of new abattoir on the

old fairground at St. James's Wholesale Market.

Braughton, Herts.—R.D.C. have approved plans for alterations and redecorations at Council offices in Bridgefoot House, Buntingford. Estimated cost £1,400.

Brighton, Sussex.—B.C. recommended to obtain tenders for extension to Civil Defence headquarters at 13 Steine Gardens. Estimated cost £2,300.

B.C. recommended to sell a site at Tongdean Lane-London Road to Greyfriars (Worthing), Ltd., 8-14 South Street, Lancing, for development, with another site to the north, by erection of 42 two-bedroom flats, 34 garages and 18 parking spaces.

Bristol.—City Council recommended to approve scheme for the provision of a mezzanine floor at the City Art Gallery. Estimated cost £4,125.

City Architect has prepared plans for a lido at Eastville Park. Estimated cost £30,000.

Welfare Services Committee propose the provision of a recreational centre at Romney Avenue, Lockleaze. Estimated cost £20,000.

M.E. have approved the erection of a new youth centre at Southmead and a hall at Lawrence Weston Youth Centre during 1960-62 for E.C. Estimated cost £27,000.

Burley-in-Wharfedale, Yorks.—Leeds Regional Hospital Board have approved development scheme at Scalbar Park Mental Hospital. Plans include extensions to provide a 44-bed admission block, two convalescent villas, each of 30 beds, and a new boilerhouse. Estimated cost £200,000.

Bury St. Edmunds, Suffolk.—Gelder and Kitchen, Alfred Gelder Street, Hull, are the architects for the erection of a silo with offices and laboratory at Hollow Road, for Associated British Maltsters, Ltd.

Camberley, Surrey.—Co. E.C. recommended to approve sketch plans for additional classroom with corridor extension at Old Dean County Primary School. Estimated cost £3,246.

Cannock, Staffs.—Ministry have approved the erection of a mental health centre at Cannock for C.C. Estimated cost £32,000.

Cardiff.—George Elliott and Co., Ltd., Collingdon Road, Cardiff, propose the erection of a refrigerator factory in the Dockland area.

Cardigan.—B.C. to proceed with the preparation of plans for the erection of two blocks of six garages, each with two flats above, at Maeshofford Estate.

Cheshunt, Herts.—C.C. recommended to proceed, subject to Ministry approval with the erection of a five-form entry secondary modern school at Mill Lane, estimated cost £311,366; approve the provision of a cowhouse, dairy, foodstore, loose boxes, and a two-bay Dutch barn and lean-to implement shed at Holding No. 1, Francis Farm. £3,300.

Chesterfield, Derbyshire.—Ministry have granted permission for the erection of a sports arena at Queen's Park for B.C. Estimated cost £30,000.

Chester-le-Street, Dur.—Fennell and Baddiley, Bridge End Chambers, are the architects for glazing factory and office, Station Road, for J. L. Hawk, Chester-le-Street.

Chichester, Sussex.—C.C. have approved plan for the erection of a public convenience at Oaklands Park, for City Council.

City Council recommended, subject to Ministry approval, to lease a site at the Industrial Estate, Terminus Road, to Chichester Press, Ltd., for the erection of an industrial building.

Cumberland.—C.C. recommended to approve the erection of a district library at Seascale. Estimated cost £8,693.

C.C. recommended to approve scheme for extensions at Cumberland and Westmorland Farm School, Newton Rigg. Estimated cost £145,000.

C.C. recommended to approve following developments for planning purposes: use of about eight acres of land at Lowca as the site for a new school and playing fields; construction of new classrooms and ancillary accommodation comprising the second instalment of Hensingham Junior School; second instalment of Salterbeck School, comprising nine additional classrooms; the erection of a new three-class primary school at Salterbeck for infants.

Co. E.C. have approved scheme for provision of a comprehensive school to be erected at Egremont. Estimated cost £500,000.

Chippenham, Wilts.—B.C. recommended to invite tenders from selected contractors for the erection of the changing room at John Coles Park.

Chobham, Surrey.—C.C. recommended to approve sketch plans for extensions and adaptations to provide three-classroom block, etc., at Chobham County Infants' School. Estimated cost £21,482.

Coulsdon, Surrey.—Co. E.C. recommended to approve sketch plans for extensions and adaptations to provide three additional classrooms, etc., at Toldene County Primary School and extensions to provide two additional classrooms at Woodcote County Primary School. Estimated cost £21,463 and £21,600, respectively.

Croydon, Surrey.—B.C. recommended to apply for sanction to borrow £3,950 for the provision of an attendant's room and shelter in the North Downs Crescent children's playground, and a weather shelter, lavatories and attendant's room in the Little Road, Apsley Road and Royal Normal College Estate children's playgrounds have submitted to Ministry, for approval, plans for an old people's home at Monks Hill estate, estimated cost £65,000.

B.C. recommended to grant planning permission, subject to conditions, for the demolition of the Eros Cinema, North End, and the erection of offices, cinema and shops on the site, for Cranleigh Group, Ltd., 109 Princess Street, Manchester, 1; demolition of 25-27 Dingwall Road and 26 Lansdowne Road, and erection of office block on site, for Advance Freehold Investments, Ltd., City Wall House, 129-139 Finsbury Pavement, London, E.C.2; demolition of 14 and 15 High Street and erection of shops with storage over, for Town Investments, Ltd., 51 South Audley Street, London, W.1; erection of four shops, with maisonettes over, and four garages at 134-138 Upper Shirley Road, Shirley, for H. W. West and Sons, 139 Shirley Road; shops, with offices over, and basement car park on site of Congregational Church, George Street, for Murray Real Estate Co., Ltd., Neale House, St. James's Street, London, S.W.1; office block and basement car park at 2-4 Lansdowne Road and 8 Walpole Road, for Burleigh Gardens Investments, Ltd., 48 Albemarle Street, London, W.1; shops on two storeys, with stockrooms over, on site of Congregational Church, George Street, for Town and City Centre Properties, Ltd., Ormonds House, St. James's Street, London, S.W.1; headquarters at 1268 London Road, Norbury, for the British Legion, 49 Pall Mall, London, S.W.1.

Dagenham, Essex.—B.C. recommended to apply for sanction to borrow £125,700 for first phase of the extension to the civic centre and the preparation of working drawings for second stage.

Dalton-in-Furness, Lancs.—U.D.C. have approved plans for extension to factory at Anty Cross, Cemetery Lane, for J. S. Blair and Son, Ltd.

Darlaston, Staffs.—Surveyor to submit an application for outline planning permission for the erection of a single-storey permanent branch library at the junction of Cairn Drive and Queen Elizabeth Avenue, Bentley estate.

Darlington, Dur.—Sketch plans have been prepared for the Skerne Park Primary School for the E.C. and the approval of the M.E. is being sought.

J. M. and J. Bartlett, Ltd., Lombard House, Warwick Street, Newcastle upon Tyne, are considering the erection of showroom, offices, and warehouse at Houndsdale, but it is not expected that the work will be proceeded with at present. The architects are Wetherell Lamb and Partners, 42 Victoria Road, Darlington.

Deal, Kent.—B.C. recommended to approve a scheme for the erection of 12 garages at Diana Gardens.

Dewsbury, Yorks.—Borough Architect to be requested to prepare sketch plan for community centre to be erected in Walnut Lane.

Doncaster, Yorks.—Work to commence soon on a plan to enlarge and modernise the Doncaster and District Railway Engineer's office in St. Swithin's Gate. Estimated cost £11,000.

B.C. have approved the erection of a branch library at Cantley.

Doncaster, Yorks.—Borough Architect recommended to prepare sketch plans for extensions to Technical High School for Boys.

Douglas, I. of M.—Tynwald recommended to approve scheme for the reconstruction of

T.T. grandstand and control tower for B.C. Estimated cost £26,000.

Dudley, Worcs. — Ministry have approved revised sketch plans for the Wren's Nest Secondary School, and B.C. hope to invite tenders for the work at end of financial year.

Dukinfield, Ches. — B.C. recommended to submit to Ministry, for approval, plans prepared by Reema Construction, Ltd., Salisbury, for the erection of a swimming baths. Estimated cost £54,661.

Dunstable, Beds. — Ministry have approved in principle B.C.'s scheme for the erection of an assembly hall at the proposed Civic Centre.

Durham. — Fowler and Armstrong, Ltd., New Elvet, are to use 2,000 sq. ft. of land at Elvet Station, for the servicing of cars. The architects are Cordingley and McIntyre, Owengate, Durham.

Durham. — R.D.C. has approved plans by the County Architect for the erection of workshops and stores at the fire brigade headquarters at Framwellgate Moor.

C.C. to build fire station at Market Lane, Swalwell.

Easington, Dur. — J. Nimmo and Son, Ltd., Castle Eden, are to extend their office block and mineral water factory. The firm have their own architects.

East Barnet, Herts. — C.C. recommended to proceed, subject to Ministry approval, with extensions at Church Hill Junior Mixed Infants' School. Estimated cost £7,400.

Eastbourne, Sussex. — B.C. recommended to grant an application for planning permission for the erection of a factory at Brampton Road trading estate, for A. H. Hunt (Capacitors), Ltd., Bandon Valley, Garratt Lane, London, S.W.18; to lease a site at Brampton Road trading estate to Edwards High Vacuum, Ltd., Manor Royal, Crawley, for the erection of a factory.

East Suffolk. — C.C. have approved the establishment of an old people's home at Stowmarket. Estimated cost £60,000.

Edinburgh. — E.C. propose to restore the buildings of Riddle's Court in the Royal Mile. Estimated cost £23,000.

Esher, Surrey. — Co. E.C. recommended to approve sketch plans for two additional classrooms with cloakroom and sanitary accommodation at Hinckley Wood County Primary School and extensions to provide two additional classrooms, etc., at Royal Kent C. of E. Primary School, Oxshott, estimated cost £11,470 and £11,560, respectively; provision of a branch library at The Forum, West Molesey, £13,800.

Essex. — C.C. have approved scheme for the erection of a domestic science block and replacement of cycle sheds at Leyton County High School for Girls. Estimated cost £10,000.

Eston, Yorks. — U.D.C. recommended to approve site in Derwentwater Road, Grangegrove, for the erection of new club premises and bowling green for the British Legion.

Exmouth, Devon. — U.D.C. recommended to approve scheme to renovate and modernise 137 pre-war houses during the next 10 years. Estimated cost £68,500.

Farnham, Surrey. — Co. E.C. recommended to approve scheme for repairs and redecorations to Willmer House. Estimated cost £3,370.

Felling, Dur. — Conversion of ground floor of the Grand Cinema, Pelaw, into a dance hall, involving mainly internal alterations. C. Solomon, architect, 30 St. Mary's Place, Newcastle upon Tyne.

Forehoe and Henstead, Norfolk. — R.D.C. have approved plans for a central depot and workshops at Ketteringham.

Godalming, Surrey. — Co. E.C. recommended to approve sketch plans for modernisation and re-equipping of housecraft room at the County Grammar School. Estimated cost £2,037.

Gravesend, Kent. — Bills of quantities are being prepared by Dadson, Butler and Barclay, Commercial Road, Portsmouth, for the erection of a church at the junction of Windsor Road and Singlewell Road, for the Deacon's Court, St. Paul's Presbyterian Church, Bailey and Piper, architects, Sphinx House, 213 West Street, Fareham. Estimated cost £12,000.

Great Yarmouth, Norfolk. — Town Planning and Factories Committee have approved plans for the use of 12 acres of land at Acle New Road as eight factory sites.

Guildford, Surrey. — Co. E.C. recommended to approve sketch plans for extensions to provide four additional classrooms with cloakrooms, etc., at Park Barn County Primary School. Estimated cost £21,600.

Hackney. — L.C.C. approved conversion and improvement works at Northwold estate. Estimated cost £29,043.

Hadleigh, Suffolk. — Marshall A. Sisson, Farm Hall, Godmanchester, is the architect, for alterations to the Deanery. Estimated cost £7,000.

Halifax, Yorks. — Richard Pickles and Partner, 1 Harrison Road, are the architects for redevelopment of site in Broad Street, making provision for departmental store multi-

storey hotel and covered car park for O. and C. Estates, Ltd., Halifax. Estimated cost £1m.

Harrogate, Yorks. — Leeds Regional Hospital Board have approved scheme for provision of twin operating suite at General Hospital. Estimated cost £50,000.

Hartlepool, Dur. — Hospital Management Committee have approved £5,000 scheme for a premature babies' unit at Cameron Maternity Hospital. P. H. Knighton, chief architect.

Hatfield, Herts. — C.C. recommended to proceed, subject to Ministry approval, with extensions to the heat engines laboratory at the Technical College and the provision of replacement accommodation for the central purchasing department at the County Workshop site. Estimated cost £7,000 and £86,317, respectively.

Hebburn, Dur. — Pryotenax, Ltd., are to extend their factory.

Hemel Hempstead, Herts. — C.C. recommended to proceed subject to Ministry approval, with improvements to lavatories and cloakrooms at Bovingdon Junior Mixed Infants' School. Estimated cost £6,350.

Hendon, Middx. — B.C. recommended to appoint Musman and Cousens, 12 Upper Berkeley Street, London, W.1, as the architects for the conversion of All Saints Church Institute into to branch library; approve site at junction of Brent Park Road and West Hendon Broadway for the erection of a police station.

L.C.C. plan to build 28 prefabricated garages at Watling estate. Estimated cost £5,150.

Hertfordshire. — Co. E.C. have approved, subject to Ministry approval, sketch plans for the erection of the first two phases of the East Herts. College of Further Education on land at the junction of the A.10 and A.110 roads. Estimated cost £306,638.

Hertfordshire. — C.C. recommended to proceed, subject to Ministry approval, with the erection of a branch library at Oxhey. Estimated cost £17,640.

Hertford. — C.C. recommended to proceed, subject to Ministry approval, with scheme for extensions and adaptations at the College of Further Education, estimated cost £8,000; approve the provision of additional dining and bedroom accommodation at Heathfield Home, Hertford Heath, £1,800.

Hetton, Dur. — Tarren and Caller, 24 Front Street, Sedgefield, are the architects for shop and flat at High Street, Easington Lane, for Thompson's Red Stamp Stores, Ltd., Gateshead.

Hinckley, Leics. — County Architect has prepared plans for an occupation centre adjoining Middlefield Lane.

Co. E. C. recommended to approve the construction of the second instalment of the new grammar school. Estimated cost £227,740.

Hitchin, Herts. — C.C. recommended to approve, subject to Ministry approval, plans for the erection of a health centre, divisional office and junior training centre at Bedford Road. Estimated cost £58,470.

Hornsea, Yorks. — U.D.C. have approved outline plans for extensions at the Floral Hall and layout for paddling pool and kiosk at the south end of Promenade. Estimated cost £11,000 and £7,000, respectively.

Hull. — Frederick Gibberd, 8 Percy Street, London, W.1, is to prepare a plan for a combined building, to include students' hostels, baths of Olympic standard and a civic restaurant, for erection on a site in Ferensway.

Ipswich, Suffolk. — B.C. recommended to approve scheme for a clinic at Chantry Estate. Estimated cost £29,150.

Ipswich, Suffolk. — Home Office have approved the erection of new fire service headquarters at Colchester Road for C.C. It is hoped to commence work in the autumn. Estimated cost £178,000.

Isle of Wight. — C.C. have approved in principle the erection of a factory at Binstead, Ryde (for leasing to Columbia Products, Ltd.).

Islington. — B.C. recommended to appoint Arthur Boxall and Partners, 7 Queen Anne's Gate, London, S.W.1, as the quantity surveyors for modernisation of part of the Caledonian Road Baths, estimated cost £7,300; and for improvements at Market Road playground, estimated cost £11,505.

L.C.C. approved a scheme for the provision of additional accommodation at Dravton Park Primary School. Estimated cost £8,240.

Kettering, Northants. — County Architect to prepare scheme for improvements to changing rooms at the gymnasium at Rockingham Road Secondary Modern School for Girls.

B.C. to apply for sanction to borrow £3,800 for the erection of 29 garages at Sussex Road.

Lambeth. — L.C.C. approved the following proposals: Adaptation of Stuart Primary School for use by Brixton School of Building, estimated cost £11,390; improvements at Loughborough Primary School, £10,680.

Lancaster, Dur. — Reavell and Cahill, Lloids Bank Chambers, Alnwick, are the architects for R.C. grammar/technical school.

Leatherhead, Surrey. — Co. E.C. recommended to approve sketch plans for extensions to provide two additional classrooms, etc., at

the Greville County Primary School, Ashtead. Estimated cost £9,415.

Leeds. — City Council recommended to appoint Charter and Evans, 4 The Headrow, quantity surveyors, for erection of the East Leeds Hostel for Women.

City Council recommended to authorise expenditure of £3,000 for construction of engineering department shop at Shadwell School for Boys.

Leek, Staffs. — Ministry have approved the erection of a mental health centre at Leek for C.C. Estimated cost £32,000.

Leicestershire. — M.E. have approved the inclusion of the second instalment of the Groby County School in the 1960-61 programme for E.C. Estimated cost £40,500.

Gent and Co., Ltd., Farraday Works, St. Saviours Road East, propose the erection of a factory of 7,750 sq. ft. at New Road, Kibworth.

Lewisham. — L.C.C. to carry out improvements at Brockley County School. Estimated cost £75,030.

Lichfield, Staffs. — Ministry have approved the erection of a mental health centre at Lichfield for C.C. Estimated cost £14,000.

Lingfield, Surrey. — Co. E.C. recommended to approve sketch plans for adaptation of H.O.R.S.A. hut to provide metalwork room at the County Secondary School. Estimated cost £1,372.

Liverpool. — Home Office have approved the erection of a new fire station at Storrington Avenue for City Council. Estimated cost £100,000.

Lowestoft, Suffolk. — Boulton and Paul, Ltd., Riverside, Norwich, plan the erection of a woodwork factory at Waveney Drive.

Loughborough, Leics. — E.C. have approved the erection of 40 study bedrooms, with a common room and staff flat, or house, on the Storer Charity site of Loughborough Training College. Estimated cost £36,710.

Manchester. — Town Planning Committee have approved in principle scheme for erection of a 14-storey students' residential block for the Manchester College of Science and Technology, Sackville Street.

Middlesbrough, Yorks. — H. Whitfield, Acklam, propose erection of two-storey car park, garage and filling station and offices at Crown Mews and Crown Street. Kitching and Co., architects, 21 Albert Road, Middlesbrough.

Monmouth. — B.C. recommended to approve plans and invite tenders from selected contractors for extensions at the Dishley factory; proceed with the provision of public conveniences at Cattle Market site (stage 1).

Morpeth, Northumb. — Newcastle upon Tyne Hospital Board are to spend between £3,000 and £4,000 on the provision of an isolation ward at Stannington Children's Hospital. P. H. Knighton, chief architect.

Newburn, Northumb. — Hindmarsh and Partners, 107 Northumberland Street, Newcastle upon Tyne, have submitted plans for office block at Westerhope to the local authority.

Newcastle-under-Lyme, Staffs. — M.E. have approved scheme for replacement of an assembly hall with other extensions at Clayton Hall Grammar School for Co. E.C. Estimated cost £50,000.

North Staffordshire University College, Keele. — Keele have launched an appeal for £60,000 for the erection of a chapel. G. G. Pace, 18 Clifton Green, York, is the architect for the scheme.

Newcastle upon Tyne. — City Children's Committee approved scheme for children's home at Benfield Road. Estimated cost £5,000.

Newcastle upon Tyne. — R.C. authorities are to erect R.C. secondary school at Fox and Hounds Lane, Newcastle. The promoters include the Rev. J. W. Milroy, South Benwell Road, Newcastle, and the Rev. E. Flynn, 233 Whickham View, Lemington.

M. and H. Gatoff, 26 Mosley Street, Newcastle, are the architects for a three-storey factory and offices in Duke Street for Hutchinson and Co., Ltd.; David Landau, Ltd., Heber Street, are to erect a warehouse at Skinnerburn Road, the architects being Tarren and Caller, 16 Great North Road, Newcastle upon Tyne; the Albion Hotel, Clayton Street, is to be converted into showrooms to plans by L. H. Fewster and Partners, 22 Conduit Street, London, W.1; Percy L. Browne, Son and Harding, Pearl Buildings, Northumberland Street, Newcastle upon Tyne, are the architects for alterations to provide a banking hall at Euston Terrace for the National Provincial Bank, Ltd.; Tyne-Tees Television, Ltd., are to carry out alterations to their premises at 69-71 City Road to plans by Edwin M. Lawson, Barras Buildings, Barras Bridge, Newcastle upon Tyne; L. I. Couves and Partners, Hood Street, Newcastle, have prepared plans for a cricket pavilion at Osborne Avenue for Northumberland County Cricket Club; Cotton, Ballard and Blow, 48 Pilgrim Street, New-

castle upon Tyne, are the architects for alterations to Bowers' Restaurant, St. Martin's Court, and Newgate Street.

Newick and Blackbell, 58 John Street, Sunderland, are the architects for three-storey office block, Albert Road, for the Royal Globe Insurance group.

Nelson, Lancs.—Peter R. Nuttall, Westwood Chambers, 5 Kay Street, Rawtenstall, Rossendale, has prepared sketch plans for the rebuilding of the St. Joseph's R.C. Church for the Rev. Fr. Corry. Wilson and Partners, 25 Winckley Square, Preston, are the quantity surveyors. Estimated cost £50,000.

Newport, Mon.—B.C. recommended to submit to Welsh Board of Health for approval plans for the erection of an old people's home at Gaer Road. Estimated cost £92,250.

Norwich.—M.E. have approved scheme for laboratories at Hewett School for E.C. Estimated cost £20,000.

Norwich (Fringe Area) Joint Advisory Planning Committee have granted planning permission for the erection of a hospital for large animals and dog kennels on a 14-acre site at Mangreen Lane, Keswick, for McLintock and Partners, Oxford Place.

Ormskirk, Lancs.—U.D.C. have approved plans for renovation of the Ormskirk Institute. Estimated cost £60,000.

Parbold, Lancs.—Lancashire Co. Architectural Committee have approved an estimate for £2,860 for improvements to the scullery, staff and sanitary accommodation at Parbold R.C. School.

Peterborough.—Portess and Richardson, architects, Lloyds Bank Chambers, Cathedral Gateway, are preparing detailed working drawings and bills of quantities for the erection of the third and fourth instalments of the technical college for the Joint Education Board.

Co. Planning Committee have granted an outline application for the conversion of the White Hart into shops, showrooms or offices for Queensland Properties, Ltd., 66 Haymarket, London, S.W.1.

Poplar.—B.C. recommended to appoint Adams, Holden and Pearson, 38 Gordon Square, London, W.C.1, as the architects for proposed flats and health centre at Stratford Street; and Welch and Lander, 38 Gloucester Place, Portman Square, W.1, as the architects for adaptation of part of Cubitt Town Library as a public hall.

Portsmouth.—Welfare Services Committee to submit to Ministry for approval, amended scheme for improvements to St. Mary's House, Milton. Estimated cost £49,000.

Purley, Surrey.—Co. E.C. recommended to approve sketch plans for an extension to Purley County Boys' School. Estimated cost £125,459.

Rainford, Lancs.—James Grundy and Co., Brownlow Street, St. Helens, are seeking permission from the Lanes, C.C. to erect a new factory and office block on a five-acre site to be negotiated.

Reading, Berks.—B.C. recommended to invite tenders for external painting and some internal painting at Reading Technical College.

Redbourn, Herts.—C.C. recommended to proceed, subject to Ministry approval, with the erection of a three-form entry secondary school. Estimated cost £188,966.

Richmond, Surrey.—Co. E.C. recommended to approve sketch plans for extensions to provide three additional classrooms with cloakroom and sanitary accommodation at Ham Meadows County Primary School. Estimated cost £14,054.

St. Albans, Herts.—C.C. recommended to approve, subject to Ministry approval, sketch plans for the erection of a two-form entry infants' school at Mount Pleasant Lane. Estimated cost £42,851.

St. Helens, Lancs.—B.C. preparing plans for erection of administration block in Birchley Street.

William and J. B. Ellis, Barclays Bank Buildings, Hardshaw Street, are the architects for new premises at junction of Coronation Street and College Street for the Practical Clothing and Supply Co., Ltd.

Salisbury, Wilts.—Co. E.C. have approved repairs to Highbury Avenue Secondary Modern School. Estimated cost £1,667.

Sawbridgeworth, Herts.—C.C. recommended to proceed, subject to Ministry approval, with the erection of an instalment of the junior mixed infants' school at High Wych. Estimated cost £14,300.

Shildon, Dur.—U.D.C. seeking planning permission to schedule a site of 12.3 acres at Dale Road for factory purposes.

Shipston-upon-Stour, War.—R.D.C. to consider scheme for improvements to public conveniences at West Street. Estimated cost £4,000 to £5,000.

Co. Planning Sub-committee have approved plans for extending Norgren Works, Campden Road for Shipston Engineering Co., Ltd.

Shrewsbury, Salop.—City and Town Buildings, Ltd., 74 Old Christchurch Road, Bourne-

mouth, propose the erection of a new general market on the old market site. Architects for the scheme are David du R. Aberdeen, 19 Southampton Place, London, W.C.1, in association with L. E. Gregory, 9 Parkstone Road, Poole, Dorset.

Staffordshire.—Ministry have approved the erection of a mental health centre at Stafford for C.C. Estimated cost £14,000.

Stevenage, Herts.—C.C. recommended to approve, subject to Ministry approval, sketch plans for the erection of a four-form entry secondary modern school at Sinks Spring, Ashree Wood, estimated cost £262,549; proceed, subject to Ministry approval, with the erection of fire and ambulance station and station officer's house at the Town Centre, £125,330.

Stockport, Ches.—B.C. recommended to proceed with schemes for the erection of phase 2 of the Brinnington Secondary School, provision of new sanitary accommodation at Cale Green Primary School and a new kitchen at Maycroft Primary School. Estimated cost £59,500, £5,600 and £3,600, respectively.

Stockton-on-Tees, Dur.—C. H. Johnson, 4 Greenway, Nunthorpe, Middlesbrough, is the architect for garage and offices in Ross Road, Stockton, for A. Bell.

Sunderland, Dur.—B.C. to build a youth centre and sports centre at Thorney Close.

Sunderland, Dur.—Bills of quantities are being completed for the B.C.'s proposed abattoir at Fulwell which is estimated to cost £296,000. T. H. Rae and Partners, quantity surveyors, 5 Green Terrace; scheme expected to go out to tender about the middle of next month.

E.C. considering schemes for the erection of a sports centre (£95,000), youth centre at Thorney Close Secondary Modern School (£60,000), and youth centre near proposed comprehensive school also to cost £60,000.

Swadlincote, Derbys.—County Planning Authority and U.D.C. have approved plans for the construction of pithead baths, canteen, kitchen, medical treatment centre, lamproom, rescue unit and ancillary departments, together with registered premises, haulage house, covered station, office block, pumphouse and workshops at Cadley Hill Colliery, Castle Gresley, for N.C.B.

Thorne, Yorks.—West Riding C.C. considering plans for erection of new infants' and junior school at High Levels. Estimated cost £15,000.

Tynemouth, Northumb.—William Stockdale, 73 Howard Street, North Shields, is the architect for the erection of new premises for Tynemouth Priory Theatre.

Tynemouth, Northumb.—Outline plans have been prepared for two ground floor and two first floor shops at the junction of Heaton Terrace and the Coast Road for S. Storer, Reed Street, North Shields; R. Sleightholme, Ltd., St. Oswalds Place, are to erect four shops and flats on the Moorhouse estate; extensions are proposed to Sheet Metal Works at Clive Street for G. S. Robinson and Co., Ltd. The architects are Wood and Pigg, 17a Northumberland Square, North Shields. I. W. Summers and Partners, 78 Howard Street, North Shields, have been appointed quantity surveyors by the E.C. for the erection of geography and art rooms at Tynemouth High School.

Wal森d, Northumb.—Plans have been approved for new factory building in Limekiln Road for Victor Products, Ltd., Church Bank. Plans have been prepared by the C.W.S. Architects' Department, 90 Westmorland Road, Newcastle upon Tyne, for converting the Lyric Cinema, Tynemouth Road, into shops, warehouse and meeting hall for the Willington Quay and Howdon Co-operative Society, Ltd., Willington Quay.

Walton and Weybridge, Surrey.—Co. E.C. recommended to approve sketch plans for a four-classroom school on Kensington Lodge site, including assembly hall, offices, cloakroom, sanitary accommodation and kitchen. Estimated cost £41,670.

Wanstead and Woodford, Essex.—B.C. recommended to prepare plans for the conversion of existing protected quarters at Horns Lane into Civil Defence training premises.

Watford, Herts.—C.C. recommended to proceed, subject to Ministry approval, with improvements to lavatories and cloakrooms at Chater Junior Mixed and Infants' Schools and conversion of existing accommodation at the Technical College. Estimated cost £12,000 and £16,000, respectively.

C.C. recommended to approve sketch plans for the erection of a girls' secondary modern and a boys' secondary modern school at Holywell estate, estimated cost £242,325 and £243,577, respectively; approve scheme for extensions to juvenile court and provision of additional accommodation at Watford Court House. £12,740.

Welwyn Garden City, Herts.—C.C. recommended to approve revised sketch plans for

the erection of a Home for the Aged and Infirm. Estimated cost £70,750.

West Hartlepool, Dur.—Improvements are proposed to the operating suite at the Cameron Hospital, for Newcastle Regional Hospital Board. P. H. Knighton, chief architect.

West Hartlepool, Dur.—B.C. propose improvements to the public abattoir; M.E. is being asked to approve in principle the provision of new premises to replace the existing Claremont Special School. The Expansion Club, Thornton Street, are to erect new premises.

West Suffolk.—Health Committee have approved an amended plan for an aged persons' home at Hospital Road. Estimated cost £50,000.

West Suffolk.—Standing Joint Committee to submit to Home Office, for approval, scheme for county and divisional police headquarters at Bury St. Edmunds. Estimated cost £70,000.

Whickham, Dur.—A. Watson, Front Street, seeking permission to erect nine shops at Front Street.

Wimbledon, Surrey.—Co. E.C. recommended to approve sketch plans for adaptations and improvements to existing primary school buildings as accommodation for Queens County Secondary Schools. Estimated cost £2,005.

Woking, Surrey.—Co. E.C. recommended to approve sketch plans for extensions to provide two additional classrooms, etc., each at Send C. of E. Primary School and Brookwood County Primary School. Estimated cost £4,000 and £13,618, respectively.

Wolverhampton, Staffs.—B.C. recommended to approve the erection of a health centre at Brooklands Parade. Estimated cost £26,500.

Worthing, Sussex.—Plans have been approved by the local authority for the erection of a church at the junction of Chesswood Road and Hanover Road for the Rev. Monsignor D. P. Wall. H. Bingham Towner, Hooke Hall, Uckfield, Sussex, is the architect; H. P. Powell, 25 Ship Street, Brighton, is the quantity surveyor; and Truscon, Ltd., 35 Lower Marsh, London, S.E.1, are the consulting engineers for the scheme. (Contract not yet out to tender.)

Worthing, Sussex.—B.C. recommended to proceed with plans for additional accommodation at the Town Hall; submit to M.E., for approval, plans for the provision of a youth centre on site adjoining the Davison C.E. Girls' School, East Worthing; approve plans for the erection of public conveniences at Brooklands (Western Road); approve, in principle, scheme for accommodation at Beach House Park, including toilets, changing room, and new cafe. Estimated cost £9,750.

York.—Yorkshire Brigade Depot at Strensall is to be rebuilt. Estimated cost £250,000.

City Council have approved in principle plans for new swimming pool on St. George's Field; City Engineer to seek site in the Acomb area for second pool.

DEMOLITION

Stepney.—L.C.C. approved the acquisition and partial clearance for housing purposes of the St. George-in-the-East Hospital site. Estimated cost £30,000.

ELECTRICAL

Hutton, Essex.—L.C.C. approved a scheme for improvements to the electrical installation at Hutton residential school. Estimated cost £8,865.

Islington.—B.C. recommended to appoint Edward Pearce and Partners, 28 Baker Street, London, W.1, as the consultants for the renewal of lighting installations at Waltersville Mansions, Manchester Mansions and 88 Hazelville Road.

Pooler.—B.C. recommended to appoint J. Stinton Jones and Partners, 21 Gloucester Place, London, W.1, as the consulting engineers for the electrical services in respect of the Island Baths scheme.

Royston, Herts.—C.C. recommended to approve the provision of a light passenger lift at Heath Lodge. Estimated cost £1,000.

Wellingborough, Northants.—U.D.C. recommended to approve provision of traffic lights at junction of Broadway and London Road. Estimated cost £1,840.

GAS AND WATER SUPPLY

Chichester, Sussex.—City Council recommended to apply for sanction to borrow £5,000 for the laying of various unspecified main extensions.

Dewsbury, Yorks.—B.C. recommended to apply for sanction to borrow £2,132 for replacement of 6in. and 4in. water main in Leeds Road with 580 lin. yd. of 6in.

Golborne, Lancs.—U.D.C. to apply for sanction to borrow £2,750 for water mains or extensions in Sheridan and Rutland Avenues, Heathmoor Avenue, Lime Grove and on Crow Wood estate.

Isle of Wight.—Water Board have approved scheme for providing a piped water supply

to the Hale Common and Roud areas. Estimated cost £6,606 and £20,412, respectively.

Mitford and Launditch, Suffolk.—R.D.C. have approved a water supply scheme to serve the villages of Bintry, Twyford, Sparham, Guist, Foxley, Bawdeswell and Billingford. Estimated cost £51,000.

St. Helens, Lancs.—B.C. to lay water mains off Moss Road adjoining Hawthorn Place, Billing, and off Crank Road near Up Holland Road. Estimated cost £750 and £1,300, respectively.

St. Ives, Hunts.—B.C. have approved in principle the provision of a water tower at Houghton Hill. Estimated cost £30,000.

Workington, Cumb.—B.C. recommended to approve the re-laying of water main in James Street. Estimated cost £1,012.

HARBOURS, PIERS AND SEA DEFENCE WORKS

Eyemouth, Berwicks.—Harbour Trust are to accept the terms of a Government £250,000 grant to deepen the harbour.

Sunderland, Dur.—William Doxford and Sons (Engineers), Ltd., Pallion, are considering the erection of a new fitting-out base below Wearmouth Bridge on the River Wear. The project is still in the exploratory stage, and the name of the consulting engineer is not yet available.

Wallsend, Northumb.—Plans have been approved for reconstructing building berth at the Wallsend shipyard of Swan Hunter and Wigham Richardson, Ltd. T. F. Burns and Partners, consulting engineers, 3 Ellison Place, Newcastle upon Tyne.

HEATING AND VENTILATING

Bridlington, Yorks.—East Riding E.C. have approved scheme for improvements to heating system at Moordfield County Junior School. Estimated cost £1,080.

Durham.—City Council to replace coal-fired boiler at City Baths by an oil-fired boiler, subject to Ministry approval. Estimated cost £4,899.

Hatfield, Herts.—C.C. recommended to approve scheme for improvements to the heating installation at Fire Brigade Workshops, Mount Pleasant Lane. Estimated cost £5,600.

HOUSING SCHEMES

Ampthill, Beds.—U.D.C. have approved scheme for 19 bungalows at Neotsbury Road and Foundry Lane.

Armagh.—U.D.C. propose to erect 95 houses on a site at Hamiltonshawn Road. Redevelopment plans for Barrack Hill allow for 70 houses to replace the existing 35.

Ashby-de-la-Zouch, Leics.—R.D.C. have approved layout of old people's bungalows at Cross Street housing site, Measham.

Ayr.—Dean of Guild Court have approved erection of 22 houses at Low Road and James Brown Avenue, Whitletts for B.C. Estimated cost £33,840.

Battersea.—B.C. have appointed architects and consultants for housing schemes, as follow: 207-217 Lavender Hill—Howes and Jackman, architects; 1 Verulam Buildings, Grays Inn, London, W.C.1; Major W. V. Zinn, consulting engineer, Collingham House, Eagle Street, London, W.C.1; J. E. Greatorex and Partners, heating consultants, 15 Berners Street, London, W.I.; Speke Road—George, Trew and Dunn, architects, 6 Queen Anne's Gate, London, S.W.1; Livingstone Road—George, Trew and Dunn, architects; Plough Road—J. E. Greatorex and Partners, heating consultants; Knox Road/Currie Road—George, Trew and Dunn, architects; Major W. V. Zinn, consulting engineer.

Bordon, Hants.—Co. Planning Authority raise no objection to the proposed erection of 436 new married quarters and 200 garages at Bordon for the War Office.

Bristol.—Housing Committee propose the erection of a block of flats to provide 41 dwellings at Granby Hill and Hope Square, Hotwells. Estimated cost £141,000.

Burnley, Lancs.—R.D.C. recommended to approve preparation of a layout for about 12 bungalows on land south of Newchurch-in-Pendle; layout for about 10 bungalows on land opposite the Council houses in Sabden Road, Higham, and layout for land in Pendle Street East, Sabden, suitable for bungalows.

Cockermouth, Cumb.—R.D.C. propose the erection of 54 houses at High Seaton.

Coleraine, Londonderry.—Ministry have approved R.D.C.'s proposal for a housing scheme at Windy Hall, adjoining the main Coleraine-Ballymoney Road and erection of 22 houses and eight garages at Claragh.

Downham, Norfolk.—Air Ministry propose the erection of 16 officers' houses and 146 airmen's married quarters at R.A.F. Station, Marham.

Dowpatrick, Down.—Munce and Kennedy, 132 University Street, Belfast, are the R.D.C.'s consultants for redevelopment schemes at Ballynahinch and Grossgar. The plans include

housing, new services and landscaping. Estimated costs £362,000 and £30,500, respectively.

Ennerdale, Cumb.—R.D.C. to ask North Eastern Housing Association to erect 50 Clinecon type houses and garages at Parton.

Folkestone, Kent.—B.C. have approved plans and estimates are being obtained for the conversion of the Royal Pavilion Hotel, Marine Parade, into about 200 flatlets for retired persons with communal dining and recreation rooms, banqueting, dining and licensed bar accommodation for non-residents and the erection of a new block of 54 flatlets for M. Burstin, C. P. Griggs, 102 Sandgate Road, the architect and Drower and Son, 127 Sandgate Road, quantity surveyors for the scheme.

Golborne, Lancs.—U.D.C. to erect 42 houses on land off Hesketh Meadow Lane for the United Kingdom Atomic Energy Authority; propose the erection of 49 three-bedroom bungalows and 36 two-bedroom bungalows on the miners' hostel site, Scota North.

Goole, Yorks.—R.D.C. propose the erection of a block of seven dwellings at Snaith.

Great Yarmouth, Norfolk.—B.C. recommended to approve a phased programme for the removal of the temporary bungalows at Wearlands estate, Gorleston, to allow permanent development and authorise Borough Engineer to prepare layout and site plans for the erection of 40 to 50 dwellings.

Guildford, Surrey.—B.C. recommended to prepare scheme for 18 bed/sitting-room flats at rear of Paxtons; approve the appointment of W. V. Zinn, Collingham House, Eagle Street, London, W.C.1, as consulting engineer for development at The Mount.

Havant and Waterloo, Hants.—South-East Hampshire Area Planning Committee have approved U.D.C.'s plans for the erection of two three-storey blocks of aged persons' flats at Somertstown, Fairfield Road, Havant.

Ince in Makerfield, Lancs.—U.D.C. to invite tenders from Homeville, Ltd., and Gregory Housing, Ltd., for the erection of gas-heated flats on the Ince Central School housing site.

Kensington.—Town planning permission has been obtained and working drawings are being prepared for a block of flats with twin towers above South Kensington Station, London, S.W.3, for Pelham Developments, Ltd. Stafford and Pollard, 24 Princess Street, Hanover Square, London, W.1, are the architects; Leslie G. Dight, 35 Portman Place, W.1, the quantity surveyor; and Reinforced Concrete Steel Co., Ltd., 54 Victoria Street, S.W.1, are the consultants. Tenders for the scheme, which is estimated to cost £600,000, have not yet been obtained.

Kidderminster, Worcs.—R.D.C. have approved the erection of 22 dwellings at Briar Hill housing estate, Chaddesley Corbett. **Kingston - upon - Thames, Surrey.**—B.C. recommended to approve the appointment of Harris and Porter, 3 Robert Street, London, W.C.2, as quantity surveyors for the development of the Surbiton Road-Penrhyn road site.

Leeds.—Housing Committee considering layout plans for following old people's bungalows: Cardigan Lane and Park View Road (22 bungalows); Moorside estate (St. Catherine's Drive and Ganners Hill) (38 bungalows); Belle Isle estate (West Grange Drive) (seven bungalows); Gipton estate (Foundry Drive) (18 bungalows).

Leeds.—City Council recommended to approve revised layout plan for development of part of Queenshill estate and that contract with N. B. Bell and Co., Ltd., for the erection of dwellings on the estate be varied to provide for the erection of 18 semi-detached dwellings instead of five blocks of terrace dwellings.

City Council recommended to appoint F. J. Samuels and Partners, 231 Gower Street, London, N.W.1, consulting engineers, to design the foundations for individual blocks of four-storey maisonettes at Lincoln Green, Ebor Gardens and New Carlton.

City Architect to be authorised to negotiate with West and Sons (Leeds), Ltd., for erection of 90 dwellings on the Raynville Road estate and 82 dwellings on the Brooklands estate and Works Department for erection of 90 dwellings on the Poplar estate, Bramley.

City Architect to be authorised to negotiate with Drury Construction (Midlands), Ltd., for erection of a further 16 dwellings on the Brackenwood estate.

Melksham, Wilts.—U.D.C. recommended to prepare scheme for two-storey blocks of one-bedroom flats at Coburg Square.

Millom, Cumb.—R.D.C. have approved plans for 44 houses and 18 garages in Devonshire Road.

Morley, Yorks.—B.C. recommended to approve layout for Asquith Avenue housing site. (South).

B.C. Town Planning Committee have approved plans for layout and 34 semi-detached houses at Scott Green, Gildersome (Ashwood Gardens), for G. H. D. Reid and Sons, Ltd., 3 Vesper Lane, Leeds, 5.

Newcastle upon Tyne.—City Council seeking Ministry permission to erect seven old people's houses, a 15-storey block of 90 flats and eight garages on land in St. Cuthbert's Road, hitherto reserved for industrial developments.

Norham, Northumb.—R.D.C. to build four old people's bungalows at Fenwick and eight at Norham.

Ormskirk, Lancs.—U.D.C. surveyor to prepare plans for erection of 12 bungalows, six two-bedroom and two three-bedroom houses on the Truscott estate, Burscough.

Paisley, Renfrews.—B.C. have approved the construction of 20-storey flats at Glen Street.

Prudhoe, Northumb.—U.D.C. to erect another 33 houses at West Wylam. J. M. Angus, architect, 3 Galligate, Newcastle upon Tyne.

Rushden, Northants.—U.D.C. to prepare scheme for six old people's bungalows and a two-storey block of eight flats with a house for a warden and common room at Kilburn Place.

Spennymoor, Dur.—North-Eastern Housing Association, Windsor Terrace, Newcastle upon Tyne, are to erect 120 houses at Barnfield Road, on behalf of Spennymoor U.D.C. It is understood that no architects have yet been appointed.

Stratford-upon-Avon, War.—B.C. recommended to approve in principle preliminary layout and type plans for further development at Masons Road.

Sudbury, Suffolk.—Housing Committee to invite tenders for the erection of 16 one-bedroom flats at Queen's Road.

Swinton and Pendlebury, Lancs.—B.C. to ask J. C. Prestwich and Sons, architects, Bradshaw Gate Chambers, Leigh, to prepare scheme for development of Chorley Road site.

Up Holland, Lancs.—U.D.C. Surveyor has been authorised to submit plans for the erection of dwellings on the Highgate estate on a site behind Beech House, Ormskirk Road.

Wallsend, Northumb.—B.C. to borrow £32,358 for the erection of 20 old people's bungalows near the Village Green, and four at Low Willington Farm.

West Hartlepool, Dur.—The North Eastern Housing Association, Windsor Terrace, Newcastle upon Tyne, are to carry out a revised scheme for the erection of 60 houses on the Rift House estate.

B.C. planning the erection of 16 old people's flatlets at Glamis Walk.

Wigan, Lancs.—Housing Committee propose the erection of 68 three-bedroom houses, 70 three-bedroom houses and 14 flats together with spaces for 93 garages on the Giants Hall playing field site. Layout submitted to Ministry for approval.

PLAYING FIELDS, PARKS, ETC.

Cumberland.—C.C. recommended to approve development of the playing field at Moor Row School. Estimated cost £1,200.

Darlaston, Staffs.—U.D.C. expect to commence work this year on improvements to George Rose Park.

Dewsbury, Yorks.—Borough Architect to be requested to proceed with layout plan for use of land at Shaw Cross (including the former Grange Road housing site) as playing fields.

Guildford, Surrey.—B.C. recommended to prepare scheme for the provision of a quarter-mile seven-lane cinder running track at Bannisters Farm playing field.

Manchester.—City Council recommended to apply for sanction to borrow £18,000 for reconstruction of sewer, Hatfield Street, Harpurhey.

Reading, Berks.—B.C. recommended to approve in principle a scheme for preparation of a playing field at Oliver Dixon Field, for Alfred Sutton Schools. Estimated cost £10,053.

Rothwell, Northants.—U.D.C. seeking grant aid from the National Playing Fields Association for the development of Manor Park as a recreational centre.

St. Helens, Lancs.—B.C. are purchasing site about 14 acres at Haresfinch House, for development as new park.

RAILWAY ENGINEERING

Ayr.—Dean of Guild Court have approved the construction of sidings for Scottish Agricultural Industries, Ltd., Newton-on-Ayr. Estimated cost £5,000.

RIVER AND FLOOD PREVENTION WORKS

Armagh.—Munce and Kennedy, 133 University Street, Belfast, are the U.D.C.'s consultants for a scheme to eliminate flooding in the Mall-Scotch Street areas and in the area between Lonsdale Gardens and the Railway. Estimated cost £32,100.

Ministry of Agriculture propose to re-align and deepen a 10-mile stretch of the Callan River to alleviate flooding. Estimated cost £50,000.

Beeches, Suffolk.—Land Drainage Committee of the East Suffolk and Norfolk River Board have submitted to Ministry for grant aid, scheme for new piling at Worlingham Staithes, on the River Waveney. Estimated cost £1,162.

Droitwich, Worcestershire.—B.C. to consider a drainage improvement scheme to prevent flooding around High Street. Estimated cost £7,000.

Norfolk.—Land Drainage Committee of the East Suffolk and Norfolk River Board have submitted to Ministry for grant aid, scheme for dredging the River Bure, between Mayton Bridge and Buxton Mill. Estimated cost £2,444.

Tewkesbury, Glos.—C.C. have submitted to M.T., for approval, draft scheme for raising the Mythe Causeway to prevent the flooding of roads. Estimated cost £60,000.

Biddulph, Staffs.—U.D.C. have approved plans for the widening and improvement of Smith Lane, at junction with Woodhouse Lane.

ROADS, BRIDGES AND SITE WORKS

Barnstaple, Devon.—B.C. to apply for sanction to borrow £17,050 for the provision of roads and footpaths between Bear Street and Fort Hill estate.

Bexley, Kent.—B.C. recommended to approve scheme for the making-up or resurfacing of footpaths at Brampton Road and Madison Gardens during this year.

Bishop's Stortford, Herts.—U.D.C. to apply for sanction to borrow £2,332 for widening of Southmill Road.

Brentford and Chiswick, Middx.—C.C. recommended to approve scheme for the completion of roadworks at Brent Way, Brentford. Estimated cost £1,530.

Brighton, Sussex.—B.C. recommended to approve widening and improvement scheme at Dyke Road and Old Shoreham Road. Estimated cost £13,000.

B.C. recommended to invite tenders for road, street lighting and sewer works on self-build housing association sites at Mouslecombe and Hollingdean. Estimated costs £31,300 and £63,400 respectively.

Bushey, Herts.—C.C. recommended to approve schemes for the improvement of (a) Little Bushey Lane (part), (b) Bushey Mill Lane, U.14, and (c) site clearance and minor carriage-way works at Little Bushey Lane. Estimated cost £14,850, £22,700 and £4,700, respectively.

Castlederg, Tyrone.—R.D.C. have approved a plan to resurface five miles of district roads next year. Estimated cost £12,500.

Cheshunt, Herts.—C.C. recommended to approve scheme for the improvement of the junction of College Road, B.156, with Turners Hill, A.1010. Estimated cost £15,375.

Cockermouth, Cumb.—U.D.C. is to carry out reconstruction work at Rose Lane.

Consett, Dur.—U.D.C. to spend £17,274 on the construction of roads and sewers to serve private building site at Woodlands Road, Shotley Bridge.

East Suffolk.—C.C. have approved scheme for widening Woodbridge By-pass. Estimated cost £180,000.

Eustree, Herts.—C.C. recommended to approve scheme for improvement of Rowley Lane, C.80 (part). Estimated cost £7,750.

Finsbury.—L.C.C. approved the widening of Goswell Road, between Baltic Street and Fann Street. Estimated cost £11,150.

Golborne, Lancs.—U.D.C. to spend £5,800 on flagging of footways and resurfacing roads in the Golborne and Lowton areas.

Hatfield, Herts.—C.C. recommended to approve schemes for the improvement of two sections of Lemsford Road, estimated cost £6,000 and £7,400, respectively; reconstruction of the deck of the county bridge, 462, carrying the route U.28 over the River Colne, near North Mymmes Park, £3,000.

Henel Hempstead, Herts.—C.C. recommended to approve schemes for the improvement of part of Hempstead Lane, Bovingdon, and White Hart cross roads, Bovingdon. Estimated cost £43,000 and £12,750, respectively.

Hendon, Middx.—B.C. recommended to approve, in principle, for submission to C.C. for approval, scheme for the widening and improvement of Page Street, including the widening of the railway bridge.

Leicestershire.—Roads and Bridges Committee have approved plans for road improvements at Husbands Bosworth.

Lichfield, Staffs.—City Council propose reconstruction work in Bird Street from the traffic lights to the junction of Gala Lane during September and October and the reconstruction of Market Street, Dam Street, Conduit Street and Breadmarket Street is also scheduled to start in October.

Middlesbrough, Yorks.—B.C. recommended to spend £20,000 on improvements to Ormesby Road.

Reading, Berks.—B.C. recommended to have a scheme prepared by the Borough Surveyor for the provision of a footbridge alongside the existing railway bridge at Tilehurst Road.

Rickmansworth, Herts.—C.C. recommended to approve scheme for improvement of a length of Harefield Road, C.101. Estimated cost £9,750.

Rushden, Northants.—U.D.C. have approved plans for making-up part of Morris Avenue. Estimated cost £2,807.

St. Albans, Herts.—C.C. recommended to approve schemes for the improvement of the junction of House Lane, C.61, and Sandpit Lane, C.62, and Tippendell Lane, St. Stephens. Estimated cost £7,500 and £9,500, respectively.

Silsden, Yorks.—U.D.C. to apply for sanction to borrow £1,130 for demolition of houses in Bridge Street and construction of a car park on the site.

Stockport, Ches.—B.C. recommended to proceed with the making-up of Marsland Terrace. Estimated cost £2,006.

Stretford, Lancs.—B.C. recommended to approve district roads reconstruction scheme. Estimated cost £20,000.

Tebury, Glos.—R.D.C. are preparing detailed drawings and specifications of site works to enable tenders to be obtained for housing development at Woodstock.

Tynemouth, Northumb.—B.C. recommended to approve the widening of Saville Street, one of the main thoroughfares of North Shields.

WallSEND, Northumb.—Borough Engineer has prepared £6,000 scheme for road improvement works at the junction of High Street East and North Terrace.

Warwickshire.—C.C. to prepare the Athertonstone By-pass scheme.

Westminster.—L.C.C. approved a scheme for a new pedestrian subway below Edgware Road at its junction with Oxford Street as part of the road improvement at Marble Arch.

West Suffolk.—Highways Committee have approved schemes for the construction of a roundabout at Fornham Park, Bury St. Edmunds, and improvement of Camps Road, Haverhill. Estimated cost £5,000 and £8,500, respectively.

Worthing, Sussex.—B.C. recommended to apply for sanction to borrow £1,650 for resurfacing and accommodation works at Goring Road/Mulberry Parade parking places.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Bury St. Edmunds, Suffolk.—Borough Engineer to prepare scheme for laying an out-fall sewer to serve the County Grammar Girls' School.

Croft, Yorks.—R.D.C. propose sewerage and sewage disposal scheme at Manfield. Estimated cost £8,100.

Daventry, Northants.—C.C. have approved in principle, R.D.C.s Flore sewerage scheme and extension of Weedon sewage disposal works. Estimated cost £43,500.

Docking, Norfolk.—R.D.C. to apply for sanction to borrow £80,333 for the Burham Market sewerage scheme.

Evesham, Worcestershire.—Ministry have held an inquiry into R.D.C.'s application to borrow £19,000 for sewerage scheme for the village of Harvington.

Freebridge Lynn, Norfolk.—R.D.C. have approved revised sewerage scheme for Wootton. Estimated cost £128,858.

Hartismere, Suffolk.—R.D.C. have approved sewerage and sewage disposal scheme for Bacton. Estimated cost £25,486.

Hendon, Middx.—B.C. recommended to approve the construction of surface water sewers at Greyhound Hill and Hendale Avenue. Estimated cost £1,500 and £2,000, respectively.

Mitford and Launditch, Norfolk.—R.D.C. to submit to Ministry and C.C. for approval, sewerage scheme for North Elmham. Estimated cost £62,100.

Stafford.—R.D.C. have approved sewerage scheme for Bradley. Estimated cost £7,388.

Swadlincote, Derbysh.—PICK, Everard, Keay and Gimson, consulting engineers, 6 Milestone Lane, Leicester, are to prepare, for consideration by U.D.C. scheme for the construction of a sewage disposal plant at Cappy Farm, Castle Gresley.

Tetbury, Glos.—R.D.C. preparing sewerage scheme for the Woodstock area.

Towcester, Northants.—C.C. have approved in principle, R.D.C.'s Shutlanger and Stoke Bruerne sewerage scheme. Estimated cost £61,081.

STREET LIGHTING

Barrow-in-Furness, Lancs.—B.C. recommended to apply for sanction to borrow £4,000 for erection of street lighting on the Tumherhill estate, etc.

Bishop's Stortford, Herts.—U.D.C. have approved scheme for improved lighting at North Street, Potter Street and South Street. Estimated cost £1,439.

Portsmouth.—City Council recommended to apply for sanction to borrow £20,000 for the 1960-61 street lighting programme.

Reading, Berks.—B.C. recommended to carry out conversion of gas lamps to electric

lighting at various roads. Estimated cost £4,801.

Silsden, Yorks.—U.D.C. to apply for sanction to borrow £4,350 for conversion of gas lamps to electric street lighting.

Withersea, Yorks.—U.D.C. have approved scheme for extension of improved lighting in the town. Estimated cost £1,961.

CONTRACTS

*Full details of the Contracts marked * will be found in our Advertisement Columns.*

BUILDING AND DECORATING (See also Housing Schemes)

Aberdare, Glam.—Demolition of an existing shelter and erection of a new bus passenger shelter, near the lower entrance to the Aberdare Park for U.D.C. Documents from the Engineer and Surveyor, Vestry Hall, Aberdare. Deposit £2. Tenders by Aug. 12.

Antrim.—Construction of a new sitting-room at Wilson House, Old People's Home, Broughshane for County Welfare Committee. Documents from Dalzell and Campbell, architects, Bath Street, Portrush. Deposit £1 ls. Tenders by Aug. 3.

Atcham, Salop.—Following works at 1-4 Rural Cottages, Uppington, and 1-4 Rural Cottages, Rushton for R.D.C. The installation of hot water systems; the provision of sanitary fittings and plumbing works incidental thereto; necessary drainage; and the construction of sewage disposal works. Documents from Engineer and Surveyor, 24 St. John's Hill, Shrewsbury. Tenders by Aug. 5.

Bacup, Lancs.—Electrical wiring and plastering work, respectively, of two maisonettes and warden's flat at Glen Top estate, Stacksteads, for B.C. Documents from the Borough Engineer, Municipal Offices, Bacup. Deposit £2 2s. Tenders by Aug. 13.

Barnsley, Yorks.—Construction of mechanical plant store, Scout Dike, Penistone, for B.C. Deposit £2 2s. Tenders by Aug. 22.

Berkshire.—Erection of an ambulance station in traditional brick construction at Eagles Close, Ormond Road, Wantage for C.C. Documents from the County Architect, Wilton House, Parkside Road, Reading. Deposit £2 2s. Tenders by Aug. 16.

Billingham, Dur.—Construction of a building to be known as Crown Buildings and forming part of the town centre development for U.D.C. The building will be mainly single storey (part two-storey) and will contain a bank, a post office, and branches of the Ministry of Pensions and the Ministry of Labour and will have a total floor area of approx. 9,000 super. ft. Documents from Elder and Lester, architects, Midland Bank Chambers, Town Square, Billingham. Deposit £5 5s. Tenders by Aug. 30.

Bootle, Lancs.—Extension to Civil Defence Headquarters, Knowsley Road for B.C. Documents from the Borough Surveyor's Department, Town Hall, Bootle. Deposit £2 2s. Tenders by Aug. 12.

Boston, Lincs.—Erection of open-air swimming baths at Rowley Road for B.C. Documents from the Borough Engineer and Surveyor, Municipal Buildings, Boston. Deposit £2 2s. Tenders by Aug. 20.

Bristol.—Erection of two shops, two flats, and two garages at Teyant Road, Hartcliffe for City Council. Apply to City Architect, Council House, Bristol, I, by Aug. 3.

***Cambridge.**—Erection of primary school, Histon Road, for City Council. Applications by Aug. 5. Deposit £3 3s. Tenders by Sept. 6.

***Cambridge.**—Erection of purification plant house, etc., at Lammas Land Paddling Pool for City Council. Deposit £2 2s. Tenders by Sept. 12.

Cookstown, Tyrone.—Painting work at following for U.D.C. (a) 79 houses and 10 garages at Monrush; (b) 32 houses at Rocheville and 10 at Fountain Road. Documents from the Clerk of the Council, Town Hall, Burn Road, Cookstown. Tenders by Aug. 2.

***Cricklade and Wootton Bassett, Wilts.**—Improvement to 20 houses for R.D.C. Deposit £2 2s. Tenders by Sept. 6.

Cuckfield, Sussex.—Improvement works in 31 of the houses in Bentwood Road, Little Bentwood and New England Road, Haywards Heath for U.D.C. Documents from the Housing Manager, Maxwelton, Boltro Road, Haywards Heath. Tenders by Aug. 8.

Darwen, Lancs.—Internal decoration, public baths, assembly hall and ancillary rooms and passageway for B.C. Documents from Borough Engineer, Municipal Buildings, Darwen. Deposit £2 2s. Tenders by Aug. 6.

Depwade, Norfolk.—Erection of a brick-built block of four garages, with incidental site works, at Briar Road, Harleston for R.D.C. Documents from the Engineer and Surveyor,

July 28 1960

Council Depot, Long Stratton, Norwich. Deposit £3. Tenders by Aug. 2.

Droxford, Hants.—Exterior painting of the following houses for R.D.C.: Bishop's Waltham, 32; Durley, four; Hambleton, 26; Meonstoke, two; Soberton, four; Swanmore, three; Upham, six; Wickham, 30. Documents from the Engineer and Surveyor, Northbrook House, Bishop's Waltham, Southampton. Contractors may tender for the whole or any part of the work. Tenders by Aug. 8.

Dukinfield, Ches.—Erection in the school grounds of (a) an open-air swimming pool, 75ft, by 36ft.; (b) a covered pool, 75ft, by 36ft. Quotations should be sent as soon as possible to the Chairman of the Governors, c/o Astley County Grammar School, Yew Tree Lane, Dukinfield.

Durham.—Following for C.C.: Pelton Modern School—completion of kitchen, small hall and assembly hall/gymnasium; Ivy House Hostel, Sedgfield—alterations; Hebburn Police Station—alterations; Blue House Farm, Chilton—conversion of steading to byre and dairy; Moorhouse Farm, Egglestone—erection of four-bay concrete open shed; Chilton East House Farm, Ferryhill—provision of w.c.s., alterations, etc., East Shaws Farm, Barnard Castle—reroofing buildings. Applications to the County Architect, South Street, Durham, by Aug. 3.

East Grinstead, Sussex.—Modernisation of 80 and 82 Queen's Road for U.D.C., incorporating a one-storey addition, comprising kitchen and bathroom, together with maintenance repairs and internal and external redecoration works. Documents from B. J. Cornelius, surveyor, Council Offices, East Court, East Grinstead. Deposit £2 2s. Tenders by Aug. 13.

East Grinstead, Sussex.—Supply and erection of timber or prefabricated concrete sports pavilion incorporating changing rooms, washing and sanitary accommodation, and comprising floor area of 1,670 sq. ft., to be provided at King George V playing fields for U.D.C. Documents from B. J. Cornelius, surveyor, Council Offices, East Court, East Grinstead. Deposit £2 2s. Tenders by Aug. 20.

***East Suffolk.**—Stowmarket Primary School additions for C.C. Apply by Aug. 12. Tenders by Sept. 12.

Gloucestershire.—Rodway Technical High School, Mangotsfield extension for C.C. The work comprises a single-storey extension to science block in prefabricated steel framing, having a total floor area of approximately 2,900 sq. ft. Applications to the County Architect, Shire Hall, Gloucester, by Aug. 3. Deposit £2 2s.

Gloucestershire.—Patchway Secondary Modern School extension for C.C. The work comprises a two-storey block in prefabrication steel framing, having a total floor area of 5,000 sq. ft. Applications to the County Architect, Shire Hall, Gloucester, by Aug. 3. Deposit £2 2s.

Hale, Cheshire.—Erection of one block of three shops with flats over, on the Delahays Road estate for U.D.C. Documents from the engineer and surveyor, Council Offices, Hale. Deposit £2. Tenders by Aug. 10.

Haltemprice, Yorks.—Exterior painting of 132 houses and four garages at Cotttingham for U.D.C. Documents from the Engineer and Surveyor, Anlaby House, Anlaby. Deposit £1, payable to the Treasurer. Tenders by Aug. 5.

Hele Hempstead, Herts.—Erection and supply of 37 precast concrete garages off Paston Road, including site works for B.C. Documents from A. H. Turner, borough engineer, High Street, Hemel Hempstead. Tenders by Aug. 5.

Henley, Oxon.—External painting and sundry repairs to the Council Offices, which must be completed by October 15, 1960 for R.D.C. Documents from Engineer and Surveyor, Easby House, Northfield End, Henley-on-Thames. Deposit £1 1s. Tenders by Aug. 8.

Hillsborough, Down.—Works of repair and improvement at the Courthouse, Hillsborough for Ministry of Finance. Documents from Room 103, Law Courts Building, Belfast, 1. Tenders by Aug. 22.

Hindley, Lancs.—External painting of 130 traditional houses and 16 bungalows for U.D.C. Documents from G. Bennett, housing manager, Town Hall, Hindley. Tenders by Aug. 6.

Holland.—Minor alterations and decorations at 24 Tower Street, Boston for C.C. Documents from County Architect, County Hall, Boston. Tenders by Aug. 8.

Hornchurch, Essex.—Rebuilding of two fire-destroyed iron and steel houses in Ravensbourne Crescent, Harold Wood for U.D.C. Applications to P. L. Cox, clerk of the Council, Council Offices, Hornchurch, by Aug. 2.

***Ipswich, Suffolk.**—Extension to Heathsides training centre for B.C. Deposit £2 2s. Tenders by Sept. 9.

Keighley, Yorks.—Reorganisation of housecraft room at Highfield Secondary School for B.C. Submit names to E. G. Felgate, borough architect, Borough Architect's Department, College Street, Keighley, immediately. Deposit £1.

Kingsbridge, Devon.—Erection of a cattle selling ring, new cattle pens, the erection of covering structure over existing sheep and pig pens, and other ancillary works at the Cattle Market, Ropewalk for U.D.C. The work is divided into various sections, for some of which the Council will nominate subcontractors. Documents from L. J. Hill, engineer and surveyor, The Council Chambers, Fore Street, Kingsbridge. Deposit £2 2s. Tenders by Sept. 3.

Kingswood, Som.—Construction of 24 garages on three sites with site works for U.D.C. Documents from the office of the Engineer and Surveyor. Deposit £10 cheque.

Lancashire.—Lancaster Greaves County Secondary School, alterations to form two science laboratories, preparation room and one classroom, including fittings, services and finishes for C.C. Applications to the County Architect, P. O. Box 26, County Hall, Preston, by Aug. 2.

Leatherhead, Surrey.—Erection of bus shelter and public convenience at Fetcham for U.D.C. Documents from the Engineer and Surveyor, Red house, Leatherhead. Tenders by Aug. 19.

Leeds.—Following for City Council: (1) Exterior painting of miscellaneous properties; (2) exterior painting of 44-68 The Headrow, Leeds, 1; and (3) interior painting, Lloyds Bank Chambers, Vicar Lane. Documents from the Director of Works, Sweet Street, Leeds, 11. Tenders by August 12.

Lincoln.—Erection of transport rest room, office and two flats for City Council. The construction of which is to be load-bearing cavity walls with concrete floor beams and flat roof. Documents from R. R. Alexander, city architect, Stamp End, Lincoln. Deposit £2 2s., cheque payable to Corporation. Tenders by Aug. 15.

Liverpool.—Adaptations to rooms at the Home for Invalid Women, 96 Upper Parliament Street, Liverpool, 8, for South Liverpool Hospital Management Committee. Applications to Garnet Chaplin, secretary to the Committee, Sefton General Hospital, Liverpool, 15. Tenders by Aug. 2.

Londonderry.—Nurses' residence and clinic, Claudy for County Health Committee. Documents from W. and M. Given, 1 Waterside, Coleraine. Deposit £3 3s. Tenders by Aug. 5.

***Margate, Kent.**—Bowling green pavilion at Birchington for B.C. Tenders by Aug. 13.

Morley, Yorks.—Erection of new nursery and garage buildings at Dartmouth Park for B.C. Documents from the Borough Engineer's Office, Town Hall, Morley. Deposit £2 2s. Tenders by Aug. 8.

Mountain Ash, Glam.—External painting of 70 houses in Mountain Ash and Ynysybwl for U.D.C. Documents from Trevor Hill, architect, Town Hall, Mountain Ash. Deposit £1 1s. Tenders by Sept. 5.

***Newcastle upon Tyne.**—Extensions, etc., Heaton Grammar and High Schools for E.C.

Norfolk.—Erection of a magistrates' court house at Hunstanton (floor area 3,000 sq. ft.) together with certain road works for C.C. Submit names to the County Architect, 27 Thorpe Road, Norwich, by Aug. 6. Plans seen at the County Architect's Office, or at Hunstanton Police Station.

Northampton.—Improvements, 70 houses, Bugbrooke for R.D.C., which consist mainly of bathroom extensions and provision of hot water supply, brick barns, etc. Documents from the Surveyor, 1 Cheyne Walk, Northampton. Deposit £3 3s. Tenders by Aug. 27.

North Shields, Northumb.—External painting of the High and Low Lighthouses, North Shields for Tyne Improvement Commission. Documents from R. N. Eggleton, secretary, Bewick Street, Newcastle upon Tyne, 1. Tenders by Aug. 5.

Norton Radstock, Som.—Erection of 57 lock-up garages on various housing estates for U.D.C. Documents from Redwood, Miles and Wills, architects, 18 George Street, Bristol, 1. Tenders by Aug. 6.

Oldham, Lancs.—Structural alterations of Higginshaw Secondary Modern School to provide lavatory and staff accommodation for E.C. Documents from Cameron and Middleton, chartered quantity surveyors, 21 Queen Street, Oldham. Deposit £2 2s., cheque payable to Corporation. Tenders by Aug. 11.

Omagh, Tyrone.—Erection of sculleries and bathrooms, together with the carrying out of repairs to four labourers' cottages situated at Clogherney Glebe, Lower Beragh, and one cottage situated at Garvaghey, Omagh, occupied by D. Graham, for R.D.C. Documents from Council Officers, Omagh. Deposit £2 2s. Tenders by Aug. 3.

Perth and Kinross.—Register of contractors who are prepared, if invited, to submit

tenders for individual trades in the erection or reconditioning of houses, schools, and other buildings for Joint C.C. Form of application from the County Architect, County Offices, Perth, to be returned by Aug. 15.

St. Albans, Herts.—Repainting of 168 group A-type metal street lamp columns for City Council. Documents from the City Engineer and Surveyor's Office, 16 St. Peter's Street, St. Albans. Tenders by Aug. 3.

Saint Thomas, Devon.—External painting, etc., of houses in the following parishes for R.D.C.: Alphington, Clyst Hydon, Pinhoe, Poltimore, Starcross, Stoke Canon, Tedburn St. Mary, Holcombe Burnell, Topsham, and Upton Pyne. Documents from J. R. A. Jones, clerk of the Council, Council Offices, 31 Southernhay East, Exeter. Tenders by Aug. 2.

Sunderland, Dur.—Erection of public abattoir, meat market and cold store for B.C., comprising lairages, slaughter halls, stores, meat market, refrigerated cooling chambers, frozen meat store and administration offices—total floor area approx. 47,000 sq. ft. Documents from the Borough Architect, Grange House, Stockton Road, Sunderland. Deposit £2 2s., cheques payable to Sunderland Corporation. Tenders by Aug. 22.

Truro, Corn.—Painting of 44 houses on the Tregurra estate, for City Council: Group A—Tregurra Lane—20-50, inclusive (evens), 16 houses; group B—Penmorvah Road—2-24, inclusive (evens), 12 houses; group C—Penmorvah Road—1-31, inclusive (odds), 16 houses. Documents from the City Engineer and Surveyor, Town Hall, Truro. Tenders by Aug. 8.

Seaham, Dur.—Repairs to 8 Robert Street for U.D.C. Documents from the Senior Public Health Inspector, Council Offices, Seaham. Tenders by Sept. 5.

Settle, Yorks.—Erection of one block of six garages and the construction of the approach road at Riversdale housing site, Giggleswick for R.D.C. Documents from the Council's Engineer and Surveyor, Town Hall, Settle. Tenders by Aug. 8.

Southwick, Sussex.—Erection of 32 shops, 32 flats and maisonettes over, and 32 garages in four three-storey blocks, in the town centre for U.D.C. Submit names to A. R. Shott, clerk of the Council, Town Hall, Southwick, by noon, Aug. 12.

Streatham, Cambs.—Construction of an extension to the Parish Church hall for Parochial Church Council. Documents from B. Hunt, 67 Cherry Orchard, Haddenham, Ely, Cambs.

Torquay, Devon.—Erection of booking offices at the coach station for B.C. Written applications to the Borough Surveyor, Town Hall, Torquay, by Aug. 2. Deposit £2 2s. (cheques payable to Corporation).

Tralee, Eire.—Erection of factory at Tralee for Kingdom Tubes, Ltd. Documents from A. G. Jennings, consulting engineer, O'Connell Street, Sligo. Deposit £15 15s. Drawings seen on the site at the consultant's office, or at the offices of Kingdom Tubes, Ltd., 30/32 London Bridge Road, Sandymount, Dublin. Tenders by Aug. 3.

Tynemouth.—Erection of a branch library at Billy Mill, North Shields, for B.C. Documents from the Borough Surveyor, 16 Northumberland Square, North Shields. Deposit £2 2s. Tenders by Sept. 12.

Walsall, Staffs.—Erection of a new occupation centre at Proffitt Street for B.C. Documents from M. E. Habershon, borough engineer and surveyor, Council House, Walsall. Deposit £2 2s. Tenders by Aug. 29.

West Kesteven, Lincs.—Provision of tiled canopies over the doors of 15 houses in Grantham Road, Great Gonerby, for R.D.C. Documents from the Surveyor, Sandon Close, Grantham. Tenders by Sept. 1.

West Riding.—External and internal re-decoration of the Barnoldswick child welfare centre for C.C. Application to the Divisional Architect, Salisbury Buildings, Albert Street, Harrogate, by Aug. 8. Tenders by Aug. 22.

West Riding.—Internal and external painting of the Batley Park Road J.M. and I. School for C.C. Documents from J. E. Littlewood, divisional education officer, Education Office, Queen Street, Morley. Tenders by Aug. 5.

West Riding.—Repairs to boundary wall and pointing to laundry in random areas at Northgate Lodge, Pontefract for C.C. Applications to the Divisional Architect, Bishopsgarth, Westfield Road, Wakefield, by July 25. Tenders by Aug. 22.

West Riding.—Following for C.C.: (1) Proposed new heating chamber at Knottingley Ferrybridge J.M. and I. School; (2) formation of a scullery within the existing cloakroom at South Kirkby Moorthorpe Infants' School; (3) demolition and rebuilding of the boiler-house at Hemsworth Gramar School; (4) part internal painting of Dewsbury and Batley Technical College, Batley, premises; (5) renewal of the heating boiler at Normanton County Secondary School. Applications to the

Divisional Architect, Bishopsgarth, Westfield Road, Wakefield. by Aug. 8. Only building contractors are invited to apply for contracts 1, 2 and 3. Tenders by Aug. 22.

West Sussex.—Following for Standing Joint Committee: (1) Old Petworth Police Station—conversion into flats (Job 6343); (2) police house, office and garage, at Lodsworth, near Petworth (Job 5514). Applications to the County Architect, County Hall, Chichester, by Aug. 4.

Worcestershire.—Erection of a brick boundary wall and vegetable store with demolition of existing wall and store at Hayley Green Isolation Hospital, Hagley Road, Halesowen, for C.C. Documents from the County Surveyor, County Buildings, Worcester. Tenders by Aug. 5.

York.—Erection of an open shed at the parks department depot, Knavesmire Road for City Council. Documents from E. Firth, city architect, 8 St. Leonard's Place, York. Deposit £1, cheques payable to Corporation. Tenders by Aug. 13.

CLOTHING AND TEXTILES

Lancashire.—Supply of the following for the Constabulary for period commencing October 1, 1960: (a) Uniform clothing—jackets, trousers, greatcoats, capes, stockings, etc.; (b) waterproof clothing—mackintoshes, gaberdines, etc.; (c) shirts, collars and ties; (d) helmets and caps. Applications to the Chief Constable, County Police Headquarters, Hutton, Preston, by Aug. 3.

Oldham, Lancs.—Supply of uniform clothing for the Fire Brigade for B.C. Documents from the Chief Fire Officer, Fire Brigade Headquarters, Ascroft Street, Oldham. Tenders by Aug. 13.

Wakefield, Yorks.—Supply of Fire Service uniform (including jackets—undress, trousers—undress, trousers—fire, shoes—firemen, shoes—officers) for City Council. Documents from the Chief Fire Officer, City Fire Brigade Headquarters, Piccadilly, Wakefield. Tenders by Aug. 27.

Warwickshire.—Supply of clothing for Constabulary. Tenders by Sept. 3.

DEMOLITION

Bridport, Dorset.—Demolition and clearance of houses and buildings, for B.C. Deposit £1 ls. Tenders by Aug. 26.

Dewsbury, Yorks.—Demolition of slum properties for B.C. Documents from Borough Engineer and Surveyor, Municipal Buildings, Halifax Road, Dewsbury. Tenders by Aug. 8.

Gravesend, Kent.—Demolition of properties totalling approx. 150,000 cu. ft. capacity in Royal Pier Road for B.C. Documents from the Borough Engineer and Surveyor, 6 Woodville Terrace, Gravesend. Tenders by Aug. 22.

Monmouthshire.—Demolition of six framed buildings off Monmouth Road, Usk for C.C. Foundations to be removed and the site levelled. Documents from County Architect, Queens Hill, Newport, Mon. Tenders by Aug. 9.

Northumberland.—Demolition of the two-storey dwellinghouse, known as Hamilton House, together with outbuildings, in Main Street, Haltwhistle, for C.C. Documents from the County Surveyor, Phoenix House, Queen Street, Newcastle upon Tyne, 1. Tenders by Aug. 22.

Redcar, Yorks.—Demolition of bath villas together with six reinforced concrete blocks and site clearance for B.C. Documents from the Borough Engineer, Municipal Buildings, Redcar. Deposit £1 ls. Tenders by Aug. 12.

Sheffield, Yorks.—Complete demolition and removal of approximately 275 dwellings and one public-house, all situated in the Woodside Lane redevelopment scheme for City Council. Documents from the Estate Surveyor, Town Hall, Sheffield, 1. Deposit £2 2s. cheques payable to the City Council. Tenders by Aug. 4.

Sheffield, Yorks.—Complete demolition and removal of several single-storey workshops forming part of the premises known as Painted Fabrics, Meadowhead, for City Council. Documents from the Estate Surveyor, Town Hall, Sheffield, 1. Deposit £2 2s. cheques payable to the City Council. Tenders by Aug. 8.

ELECTRICAL

Cookstown, Tyrone.—Electrical installation in hostel and extension, Loughry Agricultural College, Cookstown for Ministry of Finance. Documents from Room 103, Law Courts Building, Belfast, 1. Tenders by Aug. 18.

Dundee, Angus.—Electric light installation of the stripping accommodation and public convenience at Riverside Park for City Council. Documents from the City Quantity Surveyor, 21 City Square, Dundee. Tenders by Aug. 6.

Lancashire.—Rewiring of electrical installation at Middleton Elm Street County School kitchen and dining room for C.C. Applications

to the County Architect, P.O. Box 26, County Hall, Preston, by Aug. 2.

Romford, Essex.—Electrical installations to 24 flats and 16 houses in the Waterloo Road redevelopment area for B.C. Documents from the Borough Engineer and Surveyor, Town Hall, Romford. Deposit £2 2s. Tenders by Aug. 8.

West Riding.—Rewiring of the electrical installation to the residential block at Horsforth Springfield Special School for C.C. Applications to the Divisional Architect, Salisbury Buildings, Albert Street, Harrogate, by Aug. 3. The successful contractor will be required to commence this work before Sept. 6, 1960. Tenders by Aug. 15.

FENCING

Feltham, Middx.—Provision and erection of approx. 1,420yd. of 6ft. high corrugated steel pale fencing at Hanworth Park for U.D.C. Documents from the Engineer and Surveyor, Lynton House, Hanworth Road, Feltham. Deposit £2. Tenders by Aug. 11.

Norfolk.—Supply and delivery of the following for C.C.: 7,500 lin. yd. run of timber fencing consisting of split chestnut posts mortised to take four round larch rails to site at Scottow. Documents from the County Surveyor, County Offices, Thorpe Road, Norwich. Tenders by Aug. 10.

Salford, Lancs.—Supply and delivery of wrought-iron fencing for the Broughton Centre, Wilmur Avenue, for City Council. Documents from the Director of Parks, Buile Hill Park, Salford. 6. Tenders by Aug. 6.

Staffordshire.—Snow fencing for C.C. Applications to the County Surveyor, County Buildings, Stafford. Tenders by Aug. 11.

GAS AND WATER SUPPLY

Banbridge, Down.—Supply of water pumping equipment at Deehommed, Gransha, and supervision of erection of two water pumps with capacities in the range 10-h.p.-20-h.p. for R.D.C. Documents from R. Ferguson and S. McIlveen, consulting engineers, 15 College Gardens, Belfast. Tenders by Aug. 26.

Barnsley, Yorks.—Construction of Mossley service reservoir, etc. for B.C. Deposit £5 5s.

***Cricklade and Wootton Bassett, Wilts.**—Laying water main at Vasterne, Wootton Bassett for R.D.C. Deposit £2 2s. Tenders by Sept. 6.

Downpatrick, Down.—Water contract 9, at Drumgavelin and Clonvaraghan for R.D.C.: (a) Supplying and laying 6,630 lin. yd. of 3in. diameter spun-iron pipe; (b) constructing two 5,000-gallon service reservoirs; (c) constructing two small pumphouses. Documents from the offices of the Downpatrick Rural District Council, Quoile Road, Downpatrick. Deposit £3 3s. Tenders by Aug. 8.

***East Elloe, Lincs.**—Water main distribution scheme, contract 19 for R.D.C. Deposit £2 2s. Tenders by Sept. 3.

Forehoe and Henstead, Norfolk.—Deopham Stalland water supply for R.D.C., including the repair and reconnection of an existing disused water main and the laying of approximately 350yd. of new 3in. iron pipes, together with fittings, service connections and ancillary works. Documents from W. A. Jones, engineer and surveyor, 158 Ber Street, Norwich. Deposit £1 1s. Tenders by Aug. 22.

Newmarket, Camb.—Reinforcement of supply to Cheveley and Ashley for R.D.C., including the laying of approx. 954 lin. yd. of 4in. dia. and 333 lin. yd. of 6in. dia. c.i. water main with Tyton joints. Documents from H. E. Moore, engineer and surveyor, Council Offices, Park Lane, Newmarket. Deposit £2 2s. Tenders by Sept. 1.

***Newton Abbot, Devon.**—Augmentation of water supply, contract 1 for R.D.C. Deposit £5 5s. Tenders by Sept. 7.

Penistone, Yorks.—Laying of about 4-mile of 4in. diameter asbestos-cement pipeline along the main road (A629) through Ingberthworth, contract B for R.D.C., consisting of the excavation of trench, laying and jointing asbestos-cement pipes with detachable joints, refilling of trenches and restoring surfaces, together with the fixing of valves in connection therewith, hydrants and necessary chambers, etc. Documents from G. H. Hill and Sons (Manchester), civil engineers, 51 Mosley Street, Manchester, 2. Deposit £5 5s. cheque. Plans also seen at Council Offices, Thurlestone, near Shefford, Yorks. Tenders by Aug. 17.

St. Helens, Lancs.—Internal gas carcassing to seven shops and eight maisonettes, East Lancs Road estate, Dalehead Place, contract 2145 for B.C. Documents from M. Ward, borough engineer, Town Hall, St. Helens. Plans seen at the Architectural Department, 5 Cotman Street, St. Helens. Tenders by Aug. 3.

Saltash, Corn.—Laying of approx. 580 lin. yd. 5in., 276 lin. yd. 4in. and 33 lin. yd. 3in. spun-iron water main at Callington Road for B.C. Documents from A. de Barr, borough surveyor, Church House, Saltash. Deposit £2 2s. Tenders by Aug. 30.

***Stafford.**—Eastern area water scheme, section 5 for B.C. Deposit £5 5s. Tenders by Aug. 26.

West Lothian.—Construction of an intake with associated works on the Baddinsgill Burn, near West Linton, and the laying of an aqueduct therefrom, comprising 24in. dia. reinforced concrete and prestressed pipes to the board's existing Baddinsgill Reservoir, amounting in all to 1,391 lin. yd., for Water Board. Documents from H. Cuthbertson and Associates, consulting engineers, 13 Eglinton Crescent, Edinburgh, 12. Deposit £5. The site of the works will be pointed out to the intending contractors by a representative of the consulting engineers meeting at the bridge over the Baddinsgill Burn, on the West Linton-Baddinsgill Road, at 11 a.m. on Aug. 3. Tenders by Aug. 15.

HARBOURS, PIERS AND SEA DEFENCE WORKS

***Broadstairs and St. Peter's, Kent.**—Protection works to pier and slipway, Broadstairs Harbour, for U.D.C. Deposit £2. Tenders by Sept. 3.

Cemaes, Pembs.—Coast protection work at Cwm-yr-Eglwys, Dinas Cross for R.D.C., including the construction of approx. 67 lin. yd. of steel sheet piling 10ft. long with reinforced concrete capping beam and apron on the foreshore at Cwm-yr-Eglwys, situated about five miles east of Fishguard. Documents from D. S. Smith, clerk of the Council, Council Offices, Grosvenor Hill, Cardigan. Deposit £2 2s. Tenders by Aug. 12.

***Port Talbot, Glam.**—Construction of sea wall, Little Warren, for B.C. Deposit £2 2s. Tenders by Aug. 27.

Swansea.—Removal of 237 concrete blocks along foreshore, between Blackpill and Oystermouth, approx. size 5ft. by 5ft. by 5ft. (approx. weight 8 tons), and burying the blocks in the foreshore for B.C. Documents from the office of the Borough Engineer and Surveyor, The Guildhall, Swansea. Deposit £2. Tenders by Aug. 15.

HEATING AND VENTILATING

***Amersham, Bucks.**—Installation of hot water systems and incidental work to 22 Council houses at Penfold Cottages, Holmer Green, for R.D.C. Deposit £2 2s. Tenders by Aug. 12.

Daventry, Northants.—Installation of hot water supply systems and incidental work to eight houses, 1-8 council houses, Gulsborough Road, West Haddon for R.D.C. Documents from H. Bonson, Council Offices, Church Walk, Daventry. Deposit £3 3s. Tenders by Aug. 15.

Liverpool.—Installing new heating system at Mossfield Children's Home, Thingwall Road, for City Council. Documents from the City Engineer and Surveyor, Municipal Buildings, Liverpool, 2. Tenders by Aug. 8.

Rutland.—Supply and installation of an oil-fired heating boiler and connected equipment, including modifications to existing pipework at the County Offices, Catmose, Oakham, for C.C. Documents from Henry Gordon Goddard, consultant engineer, Newton Harcourt Manor, Leicester. Tenders by Aug. 8.

HOUSING SCHEMES

Bradford, Yorks.—Sixty-four dwellings with necessary site works at Bradford Road, Clayton, for City Council. Documents from the offices of the City Engineer and Surveyor, Town Hall, Bradford, 1. Tenders by Sept. 6.

Bromsgrove, Worcs.—Fifteen houses, five bungalows and 15 garages on Barrington Road housing estate, together with drains, paths, retaining walls and other ancillary works for U.D.C. Written applications to the Engineer and Surveyor, Council House, Bromsgrove, by Aug. 13. Deposit £3 3s. Tenders by Sept. 3.

Burry Port, Carms.—Two parlour type houses at Colby Road for U.D.C. Documents from J. E. Vaughan Evans, chartered engineer and surveyor, Council Offices, Brynmor House, Burry Port. Deposit £2 2s. Tenders by Aug. 8.

Cardiff.—Piling only for foundations to one block of two-storey flats at Green Farm, Ely for City Council. Documents from the City Architect's Department, Municipal Offices, Greyfriars Road, Cardiff. Deposit £2 2s. cheques payable to Corporation. Tenders by Aug. 4. Deposit £2 2s.

***Carlton, Notts.**—Twenty-four houses, Phoenix Farm estate, site 36, scheme 91 for U.D.C. Deposit £2. Tenders by Aug. 10.

Dover.—Four pairs of houses and two pairs of bungalows and the construction of a road at Lanacre Lane, Whitfield for R.D.C. Applications to W. Wilmott, clerk of the Council, Council Offices, Temple Ewell, near Dover, by Aug. 4. Deposit £2 2s.

Dudley, Worcs.—Eighteen old persons' bungalows, Eve Lane, Dudley for B.C. Applications to Borough Architect, 5 Ednam Road, Dudley, Worcs., by Aug. 1. Deposit £2 2s.

Dungannon, Tyrone.—Six dwellings and four garages and ancillary works at Mullaghtegle, Bush for R.D.C. Documents from F. M. W. Schofield, architect, Rural District Council Offices, Dungannon. Deposit £3 3s. Tenders by Aug. 4.

Hartlepool, Dur.—Thirty-two houses and 16 two-storey one-bedroom flats on the Milbank Crescent clearance area for B.C. Documents from the Borough Engineer, Borough Buildings, Hartlepool. Deposit £2. Tenders by Aug. 6.

Hastings, Sussex.—Erection of up to 30 dwellings in one- and two-storey construction and aged persons' meeting room and 14 garages on the Gate Farm estate, Hollington for B.C. Applications to the Borough Engineer, 37 Wellington Square, Hastings, by Aug. 8. Deposit £3 3s. payable to Hastings Corporation. Tenders by Sept. 6.

Holderness, Yorks.—One block of four flats at Bilton and two pairs of bungalows at Seaton for R.D.C. Documents from H. L. Ingham, surveyor, Council Offices, Skirnall. Deposit £2 2s. Tenders by Aug. 2.

Horsey.—Housing scheme 62, Campsbourne redevelopment area for B.C. Apply by noon Aug. 12. Tenders by Sept. 26.

Iford, Essex.—Two blocks of 12 one-bedroom flats and four blocks of 12 two-bedroom flats at The Glade for B.C. Written applications to the Borough Engineer, Town Hall, Iford. Deposit £3 3s. Tenders by Aug. 23.

Keighley, Yorks.—Ninety-three three-bedroom houses on the Hainworth Wood Road estate for B.C. Applications to E. G. Feigate, borough architect, Borough Architect's Department, College Street, Keighley. Deposit £2. Tenders by Aug. 15.

Kingsclere and Whitchurch, Berks.—Two pairs of bungalows including site and drainage works, etc., at housing site 5, Breachfield, Broughclere, for R.D.C. Documents from Henshaw and Cheek, chartered architects, Chantry House, 1 West Street, Andover. Deposit £2 2s. Tenders by Aug. 8.

Leigh, Lancs.—Thirty-two traditional-type flats at Siddow Common, for B.C. Documents from the Housing Director, Housing Department, Windermere Road, Leigh. Deposit £2 2s. Tenders by Aug. 8.

Letchworth, Herts.—A detached house and garage together with drains, services and all other ancillary works, at the Council Depot, Icknield Way East, for U.D.C. Documents from E. L. Johnson, The Council House, Letchworth. Deposit £2 2s. Tenders by Aug. 12.

Londendale, Lancs.—Twelve two-storey flats in Taylor Street, Hollingworth, near Manchester, for U.D.C. Documents from the Surveyor, Council Offices, Hollingworth, near Manchester. Deposit £3 3s. Tenders by Aug. 13.

Newcastle upon Tyne.—Following dwellings for City Council: (a) Shieldfield redevelopment area, 48 maisonettes in four-storey blocks and eight garages; (b) Walker redevelopment area, 108 maisonettes in four-storey blocks, 45 houses and 54 garages; (c) Newbiggin Hall estate group 15, 125 houses, 12 flats in two storeys and 63 garages. Applications in writing to the City Architect, 18 Cloth Market, Newcastle upon Tyne, 1. Tenders by Aug. 31.

Northumberland.—A police house and office at Warkworth for C.C. Applications to the County Architect, County Hall, Newcastle upon Tyne, 1, by Aug. 2.

Petersfield, Hants.—One pair of three-bedroom houses and three pairs of two-bedroom bungalows at Malthouse Meadows estate, Liphook for R.D.C. Documents from the Engineer and Surveyor, The Old College, Petersfield. Deposit £2 2s. Tenders by Aug. 29.

Petersfield, Hants.—Twelve old people's dwellings for U.D.C. Deposit £2 2s. Tenders by Aug. 24.

Rochester, Kent.—Sixty-two flats, Troy Town redevelopment area for City Council. Deposit £3 3s. Tenders by Sept. 6.

St. Helens, Lancs.—Twenty-four bungalows, in 12 pairs, built in traditional construction, sited fronting on to Houghton Road, for B.C. Documents from M. Ward, borough engineer, Town Hall, St. Helens. Deposit £2 2s. Plans seen at the Architectural Office, 5 Coatham Street, St. Helens. Tenders by Aug. 22.

Smethwick, Staffs.—Twelve two-bedroom maisonettes, Abbey Road, for B.C. Applications, in writing, to the Borough Engineer and Surveyor, Council House, Smethwick, by Aug. 10. Deposit £2 2s. cheque, payable to Borough Treasurer. Tenders by Sept. 9.

Wales.—Two police houses at Barnfields, Newton, for Mid-Wales Police Authority. Documents from P. E. White, clerk to the Authority, County Offices, Welshpool. Tenders by Aug. 8.

Waterford, Eire.—Thirty-three rural cottages and incidental works in various locations

throughout the county, for C.C. Tenders must be for full contract or for labour only. Documents from County Secretary (Housing Section), Davitt's Quay, Dungarvan, Co. Waterford. Tenders by Aug. 31.

Wandsworth, London.—Housing at Clapham for B.C. Apply by Aug. 3.

West Kesteven, Lincs.—Twenty-eight houses and bungalows for R.D.C. Deposit £2 2s. Tenders by Sept. 1.

Wick, Caithness.—Willowbank housing, 16th development, for B.C., including mason, carpenter, joiner and glazier, slater, plumber and drainage, plaster, painter and electrical works in connection with 92 houses. Documents from Jenkins and Marr, architects, 3 Bon-Accord Crescent, Aberdeen. Plans also seen at the office of the Burgh Surveyor, Wick. Tenders by Aug. 15.

Witney, Oxon.—Following works for R.D.C.: Hampton, 12 bungalows and six houses; Burford, four bungalows; Eynsham, eight bungalows; Hailey, six bungalows; Hanborough, eight bats and four bungalows; Hardwick, two houses; Standlake, six bungalows; Stanton Harcourt, four bungalows. Applications to Peter Dunham, architect, 2 Union Street, Luton, Beds, by Aug. 2.

MATERIALS AND SUPPLIES

Basildon, Essex.—Supply of domestic fuel oil for the period Aug. 15, 1960, to March 31, 1961, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, 88 Town Square, Basildon. Tenders by Aug. 5.

Dartford, Kent.—Supplying the following building materials for the year ending March 31, 1962, for R.D.C.: (1) Plumbers' brasswork, lead and copper; (2) sanitary ware, etc.; (3) tiled surrounds and fireplace fittings; (4) tanks, cylinders and dustbins; (5) plasterboard, fence posts and nails. Documents from the Engineer and Surveyor, Council Offices, White Oak, Swanley. Tenders by Aug. 29.

East Riding.—Supply of (a) roadstone and chippings; (b) gravel and sand during the year ending Sept. 30, 1961, for C.C. Applications to the County Surveyor, County Hall, Beverley. Tenders by Aug. 15.

Halifax, Yorks.—Supply of wooden and tubular steel furniture for the commerce section of the Percival Whitley College of Further Education, for E.C. Documents from L. T. Jackson, chief education officer, West House, Halifax. Tenders by Aug. 1.

Hendon, Middx.—Supply of various materials for period ending Sept. 30, 1961, for B.C. Tenders by Aug. 22.

Luton, Beds.—Supply of ironmongery, 40 houses, Lewsey Farm estate, for B.C. Documents from the Borough Architect, Town Hall, Luton. Tenders by Aug. 15.

Manchester.—Supply of roofing slates for 12 months ending Sept. 30, 1961, for City Council. Documents from the Director of Housing, Purchasing Office, 324 Deansgate, Manchester, 3. Tenders by Aug. 8.

Muckamore, Antrim.—Supply of specialist precast concrete work for the Pig Progeny Testing Station at Greenmount Agricultural College, for the Ministry of Finance. Documents from Room 103, Law Courts Building, Belfast, 1. Tenders by Aug. 8.

Plymouth.—Following, for the period commencing Oct. 11, 1960, for City Council: (8a) Mechanical transport at tonnage rates; (13) cement; (20) maintenance of weighbridges, beams and scales; (23) petrol, derv, kerosene, fuel oil, etc.; (51) tools; (52) plumbers' materials; (53) castings and founders' and smiths' materials; (54) electric lamps; (55) general ironmongery; (56) India-rubber goods; (57) rope, canvas, tarpaulins, etc.; (58) blinds and blind fittings; (59) crockery and glassware; (61) brushes, brooms and mats; (62) builders' materials. Documents from the Stores Officer, Municipal Offices, Athenaeum Place, Lockyer Street, Plymouth. Tenders by Aug. 12.

Scarborough, Yorks.—Supply of 1,800 galvanised taper dustbins and lids. B.S.S. 792, 34 cu. ft., 28lb., embossed S.B.C. 60 delivered to Corporation Depot, Dean Road, Scarborough, in quantities of not less than 200 and when required for B.C. The lowest or any tender will not necessarily be accepted. Tenders in envelopes endorsed "Tender for Dustbins" to V. Forshaw, borough and water engineer, Town Hall, Scarborough, by Aug. 13.

Ulster.—Supply of the following requirements for the 12 months commencing Oct. 1, 1960, for Transport Authority: (Contract 51) Grinding wheels, segments, etc.; (52) pistons, cylinder liners and piston rings; (53) high speed steel twist drills, taps and dies, tap wrenches, die stocks and solid hexagon die nuts; (54) fuel oil for heating; (55) iron castings (ordinary), chairs, brake blocks and fire bars; (56) joints—graphite, hard vulcanised fibre, rubber insertion, paper and laminated cork, fibre washers, etc.; (57) bedding oat straw and feeding hay; (58) drawing office

requisites; (59) wood screws; (60) high tensile bolts, nuts and set screws; (60a) permanent way fastenings; (61) machine screws and nuts; (62) transfers for carriages, omnibuses, etc.; (63) belting; (64) brake and clutch linings, bonnet tape and fan belts; (65) batteries and battery plates, etc.; (66) hinges, brass and steel; (67) vulcanising tyres; (68) hacksaw blades and bandsaw blading; (69) fire extinguishers and refills; (70) butane gas for cooking purposes; (71) aluminium (sheet); (72) canvas; (73) linen and cotton goods; (74) patent wadding; (75) linoleum; (76) hose clips (worm drive type); (77) electrical accessories, adaptors, plugs, switches, etc.; (78) p.v.c. and cotton sleeving, and Empire cloth; (79) machinery cleaning cloths service; (80) aluminium sections; (81) sulphuric acid and hydrochloric acid; (82) glassware; (83) beer bottles and crown corks; (84) roofing felt and accessories; (85) plasterboard, insulating board and hardboard; (86) wallpapers and accessories; (87) imported and home grown softwood. Documents from the Stores Superintendent, Duncrue Street, Belfast, 3, at a charge of 1s. for each form. Tenders by Aug. 12.

West Riding.—Supply of dry aggregate and sand for concrete, ready-mixed concrete, and chippings for the surface dressing of roads, all required in connection with the maintenance of highways for C.C. Documents from the County Engineer and Surveyor, County Hall, Wakefield. Tenders by Aug. 5.

Wrexham, Denbighs.—Supply of materials for B.C. Tenders by Aug. 15.

PLANT AND MECHANICAL TRANSPORT

Coseley, Staffs.—Supply of one refuse collection vehicle, for U.D.C., comprising 16-24 cu. yd. Eagle Compremiser body, fitted with crew cab and mounted on a Ford Trader 7-ton chassis with six-cylinder diesel engine. The whole vehicle to be painted and lettered to the requirements of the Council. Documents from H. Small, Transport Officer, Council House, Coseley. Tenders by Aug. 8.

Falmouth.—Supply and delivery of a Shenvoake and Drewry W type fore and aft tipper refuse collection vehicle of a capacity of 12 cu. yd., fitted with a S.D. patented powerpress, powered by a diesel engine for B.C. The vehicle will be required to be painted to the Council's requirements and fitted with number plates and accessories. Tenderers are required to give a full specification and details with their tender, together with illustrations, date of delivery and terms of guarantee, and are also required to state the allowance which would be made for a 1949 Karrier 10 cu. yd. refuse collection vehicle. The latter may be inspected by arrangement with the Senior Public Health Inspector. Tenders in a plain, sealed envelope, endorsed "Tender—Refuse Collection Vehicle," to E. J. K. Gibbons, town clerk, Municipal Offices, Falmouth, by Aug. 20.

Hemel Hempstead, Herts.—Following, for R.D.C.: Refuse collecting vehicle of the fore-and-aft type—(a) 16 cu. yd. nominal capacity; (b) 26 cu. yd. nominal capacity, or thereabouts, with or without auxiliary packing devices. Documents from R. H. T. Chappell, senior public health inspector, The Bury, Hemel Hempstead. Tenders by Aug. 22.

Hornsea, Yorks.—Supply of one tipping lorry, for U.D.C. Tenders by Aug. 6.

Leicester.—Supply and erection of five 40-ton gritting hoppers, for C.C. Documents from the County Engineer and Surveyor, County Offices, Grey Friars, Leicester. Deposit £5. Tenders by Aug. 19.

London.—Supply of 60 bulk trailer gritters. 70 manually fed trailer gritters for Ministry of Transport. Documents from the Chief Mechanical Engineer, Ministry of Transport, Room 401, 21-37 Hereford Road, London, W.2. Tenders by Aug. 11.

Northern Ireland.—Supply of five new Albion (5-ton) vehicles for the Milk Marketing Board for Northern Ireland. Documents from the General Manager, Milk Marketing Board for Northern Ireland, Castlehill Road, Belfast 4. Tenders by Aug. 5.

Staffordshire.—Supply of wooden huts mounted on wheels fitted with pneumatic tyres for C.C. Documents from the County Surveyor, County Buildings. Tenders by Aug. 12.

PLAYING FIELDS, PARKS, ETC.

Bury, Lancs.—Converting two shale tennis courts into two hard courts at Whitehead recreation ground for B.C. Documents from Borough Engineer's Office, Town Hall, Bury. Tenders by Aug. 2.

Kingston-upon-Thames, Surrey.—Site clearance of 17.12 acres, excavation of topsoil, use of site, for deposit of 85,000 cu. yd. approximately of selected fill, spreading topsoil, grading and seeding at Kingston Grammar School Playing Fields, Thame Ditton, for B.C. Documents from Borough Surveyor, Guildhall, Kingston-upon-Thames. Deposit £2 2s. Tenders by Aug. 16.

Lancashire.—Development of playing fields and erection of fencing at Fleetwood Bailey County Secondary School, for City Council. Applications to the County Architect, P.O. Box 26, County Hall, Preston, by Aug. 3.

Lancashire.—Supply of playing fields equipment for C.C. Documents from the Chief Education Officer, Playing Fields Service, P.O. Box 61, County Hall, Preston. Tenders by Aug. 8.

Redcar, Yorks.—Levelling, trunk road playing fields, for B.C., comprising stripping and stacking of top soil, excavation of subsoil, carting and levelling subsoil where required, and replacement of topsoil and its cultivation and sowing of the area. Applications to K. W. Ash, borough engineer, Ridley House, Coatham Road, Redcar. Deposit £2 2s. Tenders by Aug. 12.

ROADS, BRIDGES AND SITE WORKS

Aireborough, Yorks.—Making-up of Emmott Drive and Layton Mount, Rawdon (total approximate length 600ft.) with precast concrete flagged footpath, pitched carriageway surface with tarmacadam and asphalt, surface water drainage and other ancillary works for U.D.C. Documents from the Engineer and Surveyor's office, Micklefield House, Rawdon, near Leeds. Deposit £3 3s. Tenders by Aug. 5.

Altringham, Ches.—Excavating in existing carriageway and resurfacing of approximately 1,400 sq. yd. of carriageway in Manchester Road, in two-coat hot rolled asphalt conforming to B.S.S. 594: 1958 for B.C. Documents from the office of the Borough Surveyor, Town Hall, Altringham. Tenders by Aug. 13.

Antrim.—Surfacing of approx. 8,000 sq. yd. of Belfast-Lisburn Road (route T.3) between Black's Road and Beechawn Park for C.C. Documents from the County Surveyor's Office, County Courthouse, Belfast. Deposit £2 2s. Tenders by Aug. 5.

Atcham, Salop.—Following works, for R.D.C.: (1) Construction of estate service road phase 2 and ancillary works at Callow Crescent, Minsterley; (2) construction of estate service road phase 3 at Brompton Lane, Cross Houses; (3) construction and surfacing of the estate service road footpaths at The Moors, Cressage. Documents from the Engineer and Surveyor, 24 St. John's Hill, Shrewsbury. Tenders by Aug. 5.

Bacup, Lancs.—Following for B.C.: laying of approx. 2,500 sq. yd. of two-course hot-rolled asphalt at the town centre, 150 sq. yd. of free-course, bus stop, hot-rolled asphalt, and 700 sq. yd. single-course and two-course patching hot-rolled asphalt, all on A.681. Documents from the Borough Engineer, Stubby Lane, Bacup. Tenders by Aug. 11.

Ballymena, Antrim.—Carrying out of approx. 100,000 sq. yd. of surface dressing on selected lengths of roadway for B.C. Documents from the Borough Surveyor, Waveney Road Depot, Ballymena. Tenders by Aug. 2.

Banstead, Surrey.—Kerbings, footpath and surface water drainage works for U.D.C. Deposit £2. Tenders by Aug. 16.

Beddington and Wallington, Surrey.—Reconstruction of Beddington Gardens, Wallington, comprising some 600yd. kerb, lowering carriageway and surfacing in macadam, reconstructing footways, and incidental works for B.C. Documents from the Borough Engineer, Town Hall, Wallington. Tenders by Aug. 29.

Bedfordshire.—Repairs to stonework of Turvey Bridge, for C.C. Deposit £2. Tenders by Aug. 19.

Birmingham.—Construction of carriageways, etc. for City Council. Deposit £2 2s. Tenders by Aug. 17.

Birmingham.—Construction of reinforced concrete vehicular and pedestrian subways, retaining walls and ancillary works, in connection with the second section of the Inner Ring Road, Steelhouse Lane, Birmingham. 4. for City Council. Documents from the office of Sir Herbert J. Manzoni, city engineer and surveyor, Civic Centre, Birmingham. 1. Deposit £2 2s. Tenders by Aug. 15.

Bourne, Lincs.—Construction of South Street car park for U.D.C. Deposit £5 5s. Tenders by Aug. 27.

Cardiff.—Construction of piled foundations, including foundation beams, for the following sites for City Council: (1) Three-storey flats Shaw Close, Llanrumney; (2) semi-detached house block at Haylitt Close, Llanrumney; (3) two-storey flats, Aberdore Road, Gabalfa; (4) two-storey flats, Maitland Place, Grangetown. Documents from the City Architect, Municipal Offices, Greyfriars Road, Cardiff. Deposit £2 2s. each contract. Tenders by Aug. 9.

Chatham, Kent.—Reconstruction and surfacing in hot rolled asphalt of approximately 3,000 super. yd. of carriageway, together with ancillary works, at New Road Avenue, stage 2, for B.C. Documents from J. A. T. Richards, borough engineer and surveyor, Town Hall, Chatham. Deposit £2 2s. Tenders by Aug. 13.

***Chertsey, Surrey.**—Private street works for U.D.C. Deposit £1 1s. Tenders by Sept. 2.

Cheshire.—Shrewsbury-Whitchurch-Warington trunk road, A.49, improvement at Norcott Brook for C.C., comprising widening the above road for a length of approximately 600 lin. yd. The works include fencing, drainage, earthworks, kerbing, carriageway and footway construction. Documents from C. G. Day, county surveyor and bridgemaster, County Surveyor's Department, Backford Hall, near Chester. Deposit £5 5s. (cheque). Tenders by Aug. 15.

***Congleton, Ches.**—Roads and sewers, Mount Pleasant for R.D.C. Deposit £2 2s. Tenders by Aug. 10.

Cumbernauld, Renfrews.—Following engineering contract E43, at Blairlinn site, second development, for Development Corporation: (1) 5,000 sq. yd. of 33ft. to 24ft. carriageway in hot rolled asphalt inclusive of all kerbs, etc.; (2) 3,500 sq. yd. of footpaths in precast concrete slabs; (3) 500 lin. yd. 9in. diameter ferro-concrete sewer complete with precast concrete manholes; (4) 800 lin. yd. concrete pipe surface water sewer from 9in. diameter to 30in. diameter including precast concrete manholes. Applications to Chief Architect, Cumbernauld House, Cumbernauld, Glasgow, by Aug. 1.

***Dewsbury, Yorks.**—Westtown redevelopment, High Street improvement for B.C. Deposit £2 2s. Tenders by Sept. 7.

***Dorking, Surrey.**—Repaving footway for U.D.C. Apply by Aug. 8.

Dungannon, Tyrone.—Resurfacing approx. 15,000 super. yd. of trunk road carriageway for U.D.C. Documents from the office of the Town Surveyor, Market Yard, Dungannon. Tenders by Aug. 8.

***Ebbw Vale, Mon.**—Construction of roads, sewers, footways, etc., at Rassau housing site for U.D.C. Deposit £2 2s. Tenders by Aug. 17.

***Fareham, Hants.**—Construction of access road, etc., Hunts Pond Road estate, Locks Heath for U.D.C. Deposit £2. Tenders by Aug. 16.

Gravesend, Kent.—Construction of approx. 250 sq. yd. of flagged footpath, Sun Lane for B.C. Documents from the office of the Borough Engineer and Surveyor, 6 Woodville Terrace, Gravesend. Tenders by Gravesend.

***Herne Bay, Kent.**—Making-up of road at West End estate for U.D.C. Tenders by Aug. 20.

***Hertfordshire.**—Making-up five private streets for C.C. Tenders by Aug. 17.

***Hornchurch, Essex.**—Verge works, Hacton Lane, Bevan Way for U.D.C. Deposit £2 2s. Tenders by Aug. 8.

Huntingdon.—Construction of the access road to the industrial estate off St. Peter's Road for B.C., together with the laying of foul and surface water sewers. The new road consists of approx. 350yd. of 24ft. carriageway with 6ft. slabbed footpath either side. The foul and stormwater sewers are of 6in., 7in. and 15in. diameter respectively. Documents from the Borough Surveyor's Office, Ambury House, Huntingdon. Tenders by Aug. 4.

Irlam, Lancs.—Making-up part of Allotment Road, Cadishead, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Irlam. Tenders by Aug. 12.

***Isle of Ely.**—Construction of footbridge at Guyhirne for C.C. Tenders by Aug. 29.

Lancashire.—Construction and completion of roadworks in Ormonde Drive (part of) Maghull for C.C. Documents from County Surveyor and Bridgemaster, P.O. Box 9, Preston. Deposit £2, cheques payable to C.C. Plans seen at 9 Fishergate Hill, Preston. Tenders by Aug. 9.

Liverpool.—Supply and delivery of pedestrian guard rails for City Council. Documents from the City Engineer and Surveyor, Municipal Buildings, Liverpool, 2. Tenders by Aug. 12.

***Lymington Hants.**—Private street works, for C.C. Deposit £2 2s. Tenders by Sept. 5.

***Nelson, Lancs.**—Making-up of Surrey Road for B.C. Deposit £2 2s. Tenders by Aug. 16.

Newbury, Berks.—Excavation of 460yd. of trenches for the laying of oil pipelines, and for the removal of 870yd. of existing oil pipeline (8in. and 10in. pipes) at Thatcham for R.D.C. Documents from the Surveyor, Phoenix House, Bartholomew Street, Newbury. Tenders by Aug. 12.

Stretford, Lancs.—Carriageway resurfacing in hot-rolled asphalt and bitumen macadam, reflagging, rekerbing, etc., in five roads for B.C. Documents from A. H. Perry, borough engineer and surveyor, Town Hall, Stretford. Deposit £2. Tenders by Aug. 9.

Swansea.—Road and sewer works in connection with the Sketty Park housing site, part 2, for B.C. The works comprise the following quantities: Site excavation, 17,000 cu. yd.; concrete roadways, 6,800 super. yd.; pitched roadways, 9,000 super. yd.; 6in./2in. surface water sewers, 3,100 lin. yd. 6in./24in. foul water sewers, 2,400 lin. yd. Documents

from the office of the Borough Engineer and Surveyor, the Guildhall, Swansea. Deposit £5. Tenders by Aug. 22.

Wellingborough, Northants.—Laying of approximately 760yd. of concrete kerb and 1,870 sq. yd. of cold asphalt at Newcomen Road for U.D.C. Documents from Engineer and Surveyor, Council Offices, Wellingborough. Tenders by Aug. 15.

Wellington, Salop.—Construction of drainage, roads and paths at the cemetery extension, Linden Avenue, for the Wellington (Salop) Burial Joint Committee. Documents from the Engineer and Surveyor to the Wellington (Salop) Urban District Council, 14 Walker Street, Wellington. Tenders by Aug. 16.

Weston-super-Mare, Som.—Town development, housing site, phase 1, contract 2 for B.C., including the construction of 4,500 sq. yd. concrete carriageway, 1,000 lin. yd. sewers (30in., 9in. and 6in.), ditch drainage, and incidental works. Documents from the office of the Borough Engineer, Town Hall, Weston-super-Mare. Deposit £2 2s. Tenders by Aug. 15.

West Riding.—Improvement of the Liverpool-Preston-Leeds trunk road between Addingham and Cocking End in the Ilkley Urban and Skipton Rural Districts for C.C. The work consists of: (a) the construction of a single carriageway road approx. one mile in length of a nominal overall width of 60ft., the realignment of a side road for a distance of approx. 200yd. and the reconstruction of three junctions with the trunk road. The carriageways will be 33ft. wide of flexible construction and consist of bitumen macadam surfacing and single course, on a cement-bound granular base, with concrete marginal strips flanked on the outer edge by hard shoulders; (b) the construction of a reinforced concrete box culvert 9ft. by 8ft. by 160ft. in length beneath the proposed road and the existing trunk road to form a new outfall for Lumb Gill Beck to the River Wharfe. Documents from the County Engineer and Surveyor, County Hall, Wakefield, on or after Aug. 8. Deposit £25. Tenders by Sept. 5.

***Wiltshire.**—Tree felling, construction of walls and fencing on trunk road, A.303, east of B.3092 junction, Mere for C.C. Deposit £2. Tenders by Aug. 29.

***Worcester.**—St. Catherine's Vale redevelopment for City Council. Deposit £2 2s. Tenders by Aug. 24.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Benfleet, Essex.—Mechanical loading, hauling and tipping of an accumulation of some 1,500 cu. yd. of air-dried sludge from the sewage disposal works, South Benfleet, to the refuse tip, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Thundersley. Tenders by Aug. 2.

Birmingham.—Construction of a circular reinforced concrete pumping station with a pre-cast concrete segmental sub-structure, 25ft. deep, and a circular brick superstructure; also 120 lin. yd. 15in. dia. cast-iron rising main, stoneware pipe sewers, and incidental works, at Argyle Street, for City Council. Documents from the office of Sir Herbert J. Manzoni, city engineer and surveyor, Civic Centre, Birmingham, 1. Deposit £2 2s. Tenders by Aug. 17.

Bourne, Lincs.—Laying sewers in West Street, etc. for U.D.C. Deposit £5 5s. Tenders by Aug. 27.

Bournemouth, Hants.—Sewage disposal works, Holdenhurst, contract 3, for B.C., including the provision and erection of two 260-kW dual fuel alternator sets and associated switchgear. Documents from the Borough Engineer, Town Hall, Bournemouth. Tenders by Aug. 20.

Bridge-Bleas, Kent.—Supply of duplicate electrically driven vertical spindle direct coupled centrifugal sewage pumping plant to discharge approx. 75 gallons/minute against a total head of approx. 105ft., together with ancillary equipment, at Tyler Hill, for R.D.C. Documents from P. J. Thackray, engineer and surveyor, 41 Old Dover Road, Canterbury. Tenders by Aug. 24.

***Chelmsford, Essex.**—Brookend sewage disposal works, extension 2 for B.C.

Clutton, Som.—Chew Magna and Stowey Sutton sewerage scheme for R.D.C., including the construction of a complete sewage disposal works of percolating filter type, the construction of two main pumping stations, the laying of approx. 4,000yd. of 6in. and 9in. diameter cast-iron rising main and gravity sewer, and the laying of approx. 13,000yd. of concrete sewer, varying in diameter from 6in. to 18in., and also closet conversions and connections. Documents from Thomas & Morgan and Partners, consulting engineers, 23 Gelliwastad Road, Pontypridd, Glam. Deposit £6 6s. cheque. Plans also seen at the Council Offices, Temple Cloud, near Bristol. Tenders by Sept. 13.

Cwmbran, Mon.—Llantarnam relief sewer, for U.D.C., including 160yd. 6in., 140yd. 9in., and 620yd. 12in. sewers, together with 12 manholes and ancillary works. Documents from the Surveyor, Council Offices, Cwmbran. Deposit £3 3s. Tenders by Aug. 3.

Deudraeth, Merioneths.—Harlech sewerage extensions contract 1, for R.D.C., including laying approx. 3,600yd. of mainly concrete sewers, 6in. dia., the construction of manholes, and incidental work. Applications, in writing, to Richards and Dumbleton, consulting engineers, Cornwall Buildings, 45 Newhall Street, Birmingham, 3, and Greenways, Portmadoc, Caerns. Deposit £3, payable to R.D.C. Plans also seen at the office of L. Ellis, clerk of the Council, Council Offices, Penrhynedraeth, Merioneth. Tenders by Aug. 20.

***Devonshire.**—Construction of sea outfall for C.C. Tenders by Sept. 5.

***Diss, Norfolk.**—Drainage, contract 4, for U.D.C. Deposit £5. Tenders by Sept. 5.

Fareham, Hants.—Fareham Town main drainage, for U.D.C., comprising construction of approximately 7,700 lin. yd. of 9in. to 33in. diameter stoneware, concrete, spun-iron and steel pipe sewers, together with the necessary manholes, etc.; construction of a culvert-cum-footbridge in prestressed concrete, and all appurtenant works. Documents from Waterhouse and Rounthwaite, consulting engineers, 165 Westmorland Road, Newcastle upon Tyne, 4. Deposit £5 5s. Drawings seen at the offices of the Council's Engineer and Surveyor, Westbury Manor, Fareham, Hants, or at the offices of the Consulting Engineers. Tenders by Aug. 29.

***Gillingham, Kent.**—Surface water sewers for B.C. Deposit £2 2s. Tenders by Aug. 22.

Gloucestershire.—Surface water drainage at Whittucks Road, Hanham, near Bristol, for C.C., including the construction of approximately 1,500yd. of surface water sewer (15in. to 33in. diameter pipes), 18 manholes and ancillary works. Documents from the County Surveyor, Quay Street, Gloucester. Tenders by Aug. 10.

***Godmanchester, Hunts.**—Sewerage scheme, contract 2a, for B.C. Deposit £10 10s. Tenders by Aug. 26.

***Leatherhead, Surrey.**—Laying pitch fibre pipes for U.D.C. Tenders by Aug. 10.

***Leighton Buzzard, Beds.**—Surface water sewers at Hockliffe Road, for U.D.C. Deposit £2 2s. Tenders by Aug. 23.

***Leominster, Herefs.**—Sewerage and sewage disposal schemes for B.C. Deposit £10 10s. Tenders by Sept. 5.

Louth, Lincs.—Tetney and North Thoresby sewerage scheme, contract 6, for R.D.C., comprising (1) duplication of the existing sewage treatment works at Tetney, Lincs., including the construction of a balancing tank, settlement tank, filter bed, humus tank, pipelines, paths, etc.; (2) construction of approximately 1,850 lin. yd. of 6in. diameter concrete pipe sewers, manholes, etc., in North Thoresby, Lincs. Documents from the Council's engineers, John H. Haiste and Partners, Belmont House, 20 Wood Lane, Headingley, Leeds, 6. Deposit £3 3s. (cheques payable to Council). Tenders by Aug. 8.

Louth, Lincs.—North Cotes and Marsh Chapel sewerage scheme, contract 1 for R.D.C.: (1) Construction of a new sewage treatment works at North Cotes, comprising balancing tank, dosing chamber, settlement tank, filter beds, humus tank, sludge beds, sludge pumping station, pipeline, paths, etc.; (2) construction of approximately 2,600 lin. yd. of 6in. diameter concrete pipe sewers, manholes, etc., in North Cotes; (3) construction of approximately 4,750 lin. yd. of 6in. dia. concrete pipe sewers, manholes, etc., Marsh Chapel; (4) construction of two pumping stations and 1,950 lin. yd. of spun-iron rising main. Applications to John H. Haiste, and Partners, consulting engineers, Belmont House, 20 Wood Lane, Headingley, Leeds, 6. Deposit £3 3s. (cheques payable to R.D.C.). Tenders by Aug. 22.

Melton and Belvoir, Leics.—Following, for R.D.C.: (Contract 1) Approx. 67 lin. yd. of 6in. sewer in the village of Long Clawson; (2) approx. 60 lin. yd. of 6in. sewer in the village of Saxelby; (3) approx. 390 lin. yd. of 6in. sewer in the village of Thorpe Satchville. Documents from the Engineer and Surveyor, Warwick Lodge, Dalby Road, Melton Mowbray. Tenders by Aug. 13.

***Newbury, Berks.**—Sewage treatment works and pumping station N.16/1, contract 1, London Road for B.C. Deposit £5 5s. Tenders by Sept. 16.

***Newtown and Llanidloes, Monts.**—Carno sewerage and sewage disposal, stage 2, for R.D.C. Deposit £3 3s. Tenders by Aug. 22.

Nidderdale, Yorks.—Rufforth sewerage scheme for R.D.C., including laying of approximately 3,300yd. of 9in. and 6in. sewer

and 4in. rising main, with manholes and ancillary works. Documents from the office of W. K. Rodwell, consulting engineer, 40 North Street, Wetherby. Deposit £2 2s. (cheques payable to R.D.C.). Tenders by Sept. 7.

Oakham, Rutland.—Following, for U.D.C.: Laying of approx. 4,100yd. of 6in., 9in., 12in., 15in. and 18in. dia. concrete tube, cast-iron and steel sewers, together with manholes, and the construction of five sludge drying beds and other small modifications at the sewage treatment works. Documents from the offices of Pick, Everard, Keay and Gimson, engineers, 6 Millstone Lane, Leicester. Deposit £5 5s. Tenders by Aug. 24.

Porthcawl, Glam.—Construction of approximately 2,200 lin. yd. of 9in. diameter and 630 lin. yd. of 12in. diameter concrete pipe sewers, together with manholes and the cones holes and other appurtenant works, contract 9, for U.D.C. Documents from John Taylor and Sons, Artillery House, Artillery Row, Victoria Street, Westminster, S.W.1. Deposit £5 (cheques payable to the Council). Drawings seen at the offices of the Consulting Engineers or at the office of the Council's Engineer, Council Offices, Porthcawl. Tenders by Aug. 15.

***Rayleigh, Essex.**—Surface water sewer diversion, High Street/King George's Field for U.D.C. Tenders by Aug. 8.

Repton, Derby.—Following for R.D.C. Laying of approximately 2,900yd. of 9in. and 6in. diameter salt-glazed ware sewers, together with manholes and house connections; construction of a pumping station; laying of approximately 600yd. of 5in. diameter cast-iron pumping main, and construction of a sewage disposal works, comprising balancing tank, settling tank, filters, humus tank stormwater tank, pumping station, sludge drying beds, sludge storage lagoon and attendant pipework, drains, paths and roads, etc., at Ticknall. Documents from the offices of Pick, Everard, Keay and Gimson, engineers, 6 Millstone Lane, Leicester. Deposit £5 5s. Tenders by Aug. 25.

***Shifnal, Salop.**—Beckbury sewerage and sewage disposal for R.D.C. Deposit £10 10s. Tenders by Sept. 12.

***Sidmouth, Devon.**—Sea outfall sewer for U.D.C. Applications by Aug. 15.

Stratford-upon-Avon, War.—Supply and erection of the following equipment in connection with main pumping station and sewage disposal works, for B.C. Each item will be tendered for separately, but manufacturers may tender for more than one item if they wish: (a) Pumping equipments (i) main pumping station (flows up to 1,035 cumins), (ii) recirculation pumping station (flows up to 518 cumins); (b) fine screens, etc.; (c) detritus removal mechanism; (d) circular tank scraper mechanisms; (e) filter distribution equipment; (f) equipments for primary and secondary digesters; (g) flow recording instruments. Apply for full particulars to P. C. Smart, borough engineer, Rother Street, Stratford-upon-Avon. Tenders by Aug. 29.

***Tenterden, Kent.**—Main drainage of High Halden, contract 1 for R.D.C. Deposit £3 3s. Tenders by Aug. 22.

Wakefield, Yorks.—Sitlington drainage, 1960, for R.D.C., comprising the construction of a pumping station and the laying of approximately 300 lin. yd. of 4in. and 8in. spun-iron rising mains, and ancillary works at Horbury Bridge, near Wakefield. Documents from the Engineer and Surveyor, Council Offices, 18 St. John's North, Wakefield. Tenders by Aug. 13.

***West Hertfordshire.**—Construction of sludge drying beds, etc., Maple Lodge works for West Herts. Main Drainage Authority. Applications by Aug. 3. Deposit £5 (cheques payable to R.D.C.). Tenders by Sept. 28.

West Penwith, Corn.—Construction of St. Erth and Canonstown sewerage scheme, for the R.D.C., including the provision and laying of 1,751yd. of 4in. diameter, 6,257yd. of 6in. diameter stoneware sewers, 663yd. of 4in. diameter, 103yd. of 6in. diameter spun-iron sewers or rising mains, and the construction of 167 manholes, two ejector stations, together with a sewage disposal works comprising concrete tanks, conventional biological filters, drying beds, pumphouse and ancillary works. Documents from G. H. Ivory and Partners, consulting engineers, 24 Atheneum Street, Plymouth. Deposit £5 5s. (cheques payable to R.D.C.). Tenders by Aug. 11.

Wycombe, Bucks.—Stokenchurch sewerage scheme, for R.D.C., comprising laying of approximately 31,000 lin. yd. of 4in., 6in., 9in. and 12in. diameter concrete and stoneware sewers; 1,000 lin. yd. of 4in. spun-iron pumping mains; and the construction of 373 concrete manholes; one pumping station building and one ejector station building, together with road reinstatement and other ancillary works. Documents from K. E. M. Daniels, engineer and surveyor, 8-9 Easton Street, High Wycombe. Tenders by Aug. 27.

STREET LIGHTING

Castlederg, Tyrone.—Supply and erection of 79 fluorescent lanterns and other ancillary works at Castlederg for R.D.C. Documents from J. B. Williamson, clerk to Council, Rural District Council Offices, Castlederg. Deposit £5 5s. Tenders by Aug. 22.

***Ellesmere Port, Ches.**—Street lighting contract 301 for B.C. Tenders by Aug. 22.

Renfrew.—Erection of alternative schemes (a) three 80-W fluorescent, and (b) 400-W mercury discharge at Inchinnan Road (A.8), for B.C. Documents from P. J. S. Buchanan, lighting inspector, Municipal Buildings, Renfrew. Tenders by Aug. 31.

Surrey, Surbiton.—Provision of improved street lighting, 1960-61 programme and T.P. road 12, for B.C., including the installation of group A lighting, 193 sodium and 270 colour corrected mercury points. Documents from the office of R. Thirlway, borough engineer and surveyor, Council Offices, Ewell Road, Surbiton. Tenders by Aug. 10.

Wadebridge, Corn.—Supply and installation of equipment as follows, for R.D.C.: 33 400-volt colour-corrected mercury discharge lamps, mounted at 25ft., for trunk road A.39 at Wadebridge, and six similar lamps on The Platt, Wadebridge. Documents from the surveyor, A. E. Bewes, Council Offices, Wadebridge. Deposit £2 2s. Tenders by Aug. 8.

Whitby, Yorks.—Street lighting, group A and group B (contract 228) for U.D.C., comprising the supply and erection of 117 group A tubular steel octagonal columns, five wall brackets, seven group B tubular steel octagonal columns, 250-W MBF/U colour corrected H.P.M.V. lamps and lanterns and 80-W MBF/U mercury fluorescent lamps and lanterns together with control gear. Documents from the Engineer and Surveyor, Council Offices, St. Hilda's Terrace, Whitby.

Wortley, Yorks.—Street lighting at Ecclesfield, Stannington, Chapelton, and High Green, near Sheffield, for R.D.C.: Installation of colour corrected mercury street lighting schemes, complete, as follows: (Scheme 54) Ecclesfield bus route—67 125-watt lamps on 20ft. columns; (55) Stannington bus routes 60 80-watt lamps on 15ft. columns; (57) Chapelton and High Green—74 125-watt lamps on 20ft. columns; (58) (part 1) Chapelton—29 250-watt lamps on 25ft. columns. Concrete columns are specified, with some special decorative columns which may be of materials other than concrete, for certain sections of schemes 54, 55 and 57. Documents from Arthur Wikeley, engineer and surveyor, Council Offices, Grenoside, near Sheffield. Tenders by Aug. 10.

INTERNATIONAL CONTRACT

Argentine.—Construction and operation of a gas pipeline of approximately 1,800kms. in length and 30in. in diameter, from the oil-fields in the province of Santa Cruz (Flanco Sud de Comodoro Rivadavia) to Buenos Aires contract 4150, for the Republic. Documents, plans and consultations at Gas Del Estado, Alsina 1169, Buenos Aires, R.A. Tenders by Nov. 4.

AWARDS

BUILDING AND DECORATING (See also Housing Schemes)

Basildon, Essex.—Erection of shopping premises at East Walk, New Town Centre for Chesterfield Properties, Ltd. Sir John Burnet, Tait and Partners, architects, 10 Bedford Square, London, W.C.1.—Richard Costain (Construction), Ltd., Avenue Lodge, 2 Palmers Avenue, Grays, Essex.

Bath, Som.—Work in connection with the expansion of the City of Bath Training College for City Council—Griggs and Son, Ltd., Victoria Street, London, S.W.1, £298,204 (subject to Ministry approval).

Bath, Som.—Erection of a factory at Rush Hill for C. and J. Clark, Ltd., Street, Som.—C. P. Unwin and Sons, Ltd., 33 St. Peter Street, Tiverton. Estimated cost £114,100. C. Roy Beecroft and Partners, architects, 11 Orchard Street, Bristol, 1, and Venning and Hope, quantity surveyors, 16 The Crescent, Taunton. Work to commence August.

Bedlington, Northumb.—Erection of social club at Netherton. J. M. Angus, architect, 3 Gallowgate, Newcastle upon Tyne. C.W.S. Building Department, Benton Road, Newcastle upon Tyne.

Belfast.—Erection of Queen's University Students' Community Centre and Hostel at

7 College Park East for the Presbyterian Church in Ireland—Thombury Brothers, Lagavale Building Works, 23 Ravenhill Road, Belfast. Estimated cost £43,000. Robert McKinstry, architect; 58 Rugby Road, Belfast. W. H. Stephens, quantity surveyor, 13 Donegall Square North, Belfast. Work to commence Aug.

Bexhill-on-Sea, Sussex.—Rebuilding of bank at the corner of Devonshire Road and Parkhurst Road for Martins Bank Ltd. Main contractor—E. Godwin and Sons, 34 Sackville Road, Bexhill; demolition contractor—H. Pannett (Eastbourne), Ltd., Lutonbridge Drive, Eastbourne, estimated cost £27,000. Benz and Williams, architects, 53 Gildredge Road, Eastbourne; Martin and Martin, quantity surveyors, 28 Sea Road, Bexhill-on-Sea; John De Bremaecker and Partners, consulting engineers, 3 Southampton Place, London, W.C.1.

Billingham-on-Tees, Dur.—Additions to St. Aidan's Church Roseberry Road estate, Charlewood and Curry, architects, 14 Neville Street, Newcastle upon Tyne—Charles Tennet (Contractors), Ltd., Church Road, Stockton-on-Tees, £26,000.

Bolton, Lancs.—Erection of foundry, pattern shop and machine shops on site situated between Union Road and Crompton Way, Tonge Moor for the Walsley (Bury) Group, Ltd. Bradshaw Gass and Hope, architects, 19 Silverwell Street, Bolton—G. and J. Seddon, Ltd., Little Hulton, Walkden, near Bolton. Work commenced.

Bristol.—Erection of St. Pius X Roman Catholic Primary School, Withywood, for the Clifton Catholic Diocesan Schools Commission, Burrough and Hannan, architects, Bedford House, 23 Richmond Hill—Robert Watson and Co. (Constructional Engineers), Ltd., Filton, Bristol.

Bury St. Edmunds, Suffolk.—Reroofing Moyses Hall for B.C.—J. Payne and Sons (Tilers), Ltd., 11 Steele Road, London, W.4, £753.

Cheam, Surrey.—Construction of kitchen and extensions to assembly hall at Cheam Park County Infants' School for Co. E.C.—Uden and Co. (Epsom), Ltd., 53 South Street, Epsom, £14,345 (recommended).

Chertsey, Surrey.—Provision of science laboratory, two division rooms and art room at Ottershaw School for Co. E.C.—R. Holford and Co., Ltd., Walnut Tree Close, Guildford, £16,835 (recommended).

Darlington.—Additions to East Haven for E.C. E. A. Tornbohm, borough architect—Direct Labour.

Doncaster, Yorks.—Alterations to shop premises in Station Road for The Doncaster Co-operative Society, G. S. Hay, chief architect, C.W.S., Ltd., 1 Balloon Street, Manchester—J. H. Gilbert, Ltd., 15 Cemetery Road, Doncaster. Work commencing Aug. 3.

Downham, Norfolk.—Erection of a rectory at Church Road—S. Staines and Sons, Stow, Downham Market.

Dunstable, Beds.—Erection of a new factory at Dunstable for Hawthorn Baker, Ltd.—R. Marriott, Ltd., Midland Works, Rushden, Northants. Estimated cost £60,000. Peter Dunham, Widdup and Harrison, architects, 2 Union Street, Luton, and S. J. Smith and Partners, quantity surveyors, Alma House, Alma Street, Luton.

Durham.—Allegation to observatory for Durham University. Easton and Robertson, architects, Bedford Square, London, W.C.1—J. and W. Lowry, 64 Bath Lane, Newcastle upon Tyne, £10,000.

Edinburgh.—Erection of new premises at Simon Square, The Pleasance for Edinburgh Cripples and Invalid Children's Aid Society, 12 George Street—Mason and brick—Melrose and Thomson, Ltd., 3 Drum Terrace, Easter Road, Edinburgh, 7; slater—Wm. McLean, 12 South Fort Street, Leith, Edinburgh, 6; joiner—Peter Nimmo and Son, Ltd., Fountainhall Works, Newbridge, Midlothian; plasterer—D. and J. Borthwick, 8 Silvermills Lane, Edinburgh, 13; electrician—Wm. Allan Smith and Co., Ltd., East Silvermills, Edinburgh, 3; plumber—David Blake and Co., Ltd., 10 Beaverhall Road, Edinburgh, 7; lift engineers—John Bennie, Ltd., Moncur Street, Glasgow, S.E.; painter—Dobie and Son, Ltd., 94 George Street, Edinburgh, 2. Estimated cost £20,000. Gordon and Dey, 36 Heriot Row, are the architects and Tulley and Maguire, 11 Wemyss Place, the quantity surveyors.

Ewell, Surrey.—Construction of changing accommodation at Priest Hill for Co. E.C.—Bird and Cargill, Ltd., Belloc Works, Gloucester Road, London, W.5, £18,475 (recommended).

Farnham, Surrey.—Construction of studio and workroom at School of Art for Co. E.C.—Lawton Civil Engineering, Ltd., £11,058 (recommended).

Fulham.—Following for B.C.: Erection of a public convenience at Gabbs Green, North

End Road—Tersons, Ltd., 4 Dollis Park, London, N.3, £9,228 (recommended).

Reorganisation and partial reconstruction of the refuse destructor—Heenan and Froude, Ltd., Worcester, £168,488 (recommended, revised tender).

Gateshead, Dur.—Erection of the Elgin Secondary Technical School for E.C. G. F. Winters, borough engineer—Middleton and Co., Queen Alexandra Bridge Approach, Sunderland, £248,513.

Gloucestershire.—Erection of a fire station at Fairford for C.C.—Shurdington Construction Co., Mercia Road, Dever New Inn Lane, Shurdington, Cheltenham, £9,157.

Grangemouth, Stirlings.—Erection of (a) three new plants, (b) a cooling tower, and (c) offices for British Hydrocarbon Chemicals, Ltd., Devonshire House, Mayfair Place, London, W.1. (a) Methanol plant—Chemical Construction (G.B.), Ltd., 6 Henrietta Place, London, W.1; Ethylene dichloride plant—The Lumus Co., Ltd., 80 Regent Street, London, W.1; Butadiene plant—Fluor Engineering and Construction Co., Ltd., Finwell House, Finsbury Square, London, E.C.2; (b) Cooling tower—Film Cooling Towers, Ltd., Lionel Road, Kew Bridge, Brentford, Middx.; (c) Offices—George Wimpey and Co., Ltd., The Grove, Hammersmith, London, W.6. The cost of the three plants is approx. £5m.

Great Yarmouth, Norfolk.—Last two stages of the reconstruction of the bathing pool for the Entertainments and Publicity Committee—H. A. Holmes and Sons, Ltd., South Ice House Hill, Gorleston, Great Yarmouth, £49,185.

Guildford, Surrey.—Extensions and adaptations to provide two additional classrooms, etc., at Burpham County Primary School for Co. E.C.—R. J. Stagg, Ltd., 28 Dumcombe Road, Godalming, £20,000 (recommended).

Guisborough, Yorks.—Supply and erection of pavilion for the King George V playing field for U.D.C.—H. Peel, Ltd., Guisborough, £1,167.

Halifax, Yorks.—Erection of a new C. of E. Secondary Modern School for Governors of the Holy Trinity (C. of E.) Transferred Secondary Modern School—Piccles Bros. Builders, Ltd., Millthorn, Gibbott Street, Halifax, estimated cost £102,649. Jones and Stocks, architects, 7 Blenheim Terrace, Leeds, 2; Eric Walmsley and Co., 19 Bull Green, Halifax, are the quantity surveyors, and R. W. Gregory and Partners, 1 Brazenose Street, Manchester, 2, the heating consultants.

Extensions and alterations to head office premises for Halifax Building Society. Clement Williams and Sons, architects, 38 Prescott Street, Halifax—L. and W. Morrell, Ltd., Low Moor, Bradford.

Hatfield, Herts.—Erection of the Hatfield Health Centre for C.C.—C. Brightman and Son, Ltd., Ebury Road, Watford, £25,252 (recommended).

Hendon, Middx.—Following for B.C.: External redecoration of group 1 (157 houses and four garages), group 2 (296 houses) group 5 (191 houses and 14 garages) and group 6 (187 houses)—Geo. Jones and Son, Ltd., 27b Kensington Church Street, London, W.8, £2,342, £4,195, £2,851 and £2,655, respectively; group 3 (186 houses and 14 garages)—P. J. Hartel (London), Ltd., 1 Montague Street, London, W.C.1, £2,421; group 4 (122 flats) and group 7 (77 houses and 36 flats)—Wm. Moss and Sons, Ltd., North Circular Road, London, N.W.2, £1,072 and £2,533, respectively; underpinning works at Broadfields Junior School—Pynford, Ltd., Lancaster Road, London, N.4, £2,933; extension to motor repair workshops at Hendon Way Depot—Circle Construction Co., Ltd., Wembley Hill Road, Wembley, £12,281 (recommended).

Structural alterations in the Borough Treasurer's Department at the Town Hall—Howard Farrow, Ltd., Bank Buildings, Russell Parade, Golders Green, London, N.W.11 (recommended, extension of contract).

Hertfordshire.—Following for C.C.: Provision of offices and garages at police houses at Benington, Kimpton and Tewin—Charles Smith, Kimpton, Hitchin, Herts, £2,421; Ashwell—W. A. and F. Bray, Ltd., West End, Ashwell, Baldock, £888; supply and erection of 80 garages at various police houses during 1960-61—Bell and Webster, Ltd., Essex Road, Hoddesdon, Herts. (recommended).

High Halstow, Kent.—Construction of a village hall and adjoining children's playground. G. E. Clay and Partners, architects, 10 New Road, Rochester—Messrs. Wilsons, Hoo. Estimated cost £14,000.

Hull.—Foundations for erection of four-storey building at junction of Market Place and Scale Lane for Martin's Bank, Ltd. Gelder and Kitchen, architects, 120 Alfred Gelder

Street, Hull—Quibell and Sons, Ltd., 354 Beverley Road, Hull.

Keighley, Yorks.—Reorganisation of housecraft room, girls' grammar school for B.C. E. G. Felgate, borough architect—B. B. Speight and Sons, 65 Oakworth Hall, Oakworth.

Leek, Staffs.—Alterations and extensions to Moorside County Secondary School, Cellarhead for Co. E.C.—Eardley and Whittaker, Ltd., 94 Millrise Road, Milton, Stoke-on-Trent, £17,072.

Liverpool.—Second stage of the Liverpool College of Technology for E.C.—Tyson's (Contractors), Ltd., Dryden Street, Liverpool, 5, £112,469.

Llandudno, Caerns.—Erection of a school for handicapped children at Nant-y-Gamar Road, Craigydion for Co. E.C.—Edward Jones (Contractors), Ltd., Bangor Road, Penmaenmawr. Estimated cost £129,068.

London.—Following for City Corporation: Repair of blocks of houses on estate to the north of Metropolitan Cattle Market, at Halse Street—R. G. Jones, 86a Yerbury Road, London, N.19, £6,217 (recommended); S. M. Rintoul, Ltd., £6,362; W. J. Cooper (Barnsbury), Ltd., £6,931; S. Varney and Co., Ltd., £7,851.

Maintenance works at Viaduct Buildings, Holborn—Holbrook (Builders), Ltd., 40 Aldersgate Street, E.C.1, £2,636 (recommended); J. C. W. Catley and Co., Ltd., £2,667; Ashford and Moll, Ltd., £2,823; Anderson and Brown (Bishopsgate), Ltd., £3,418; Heeps Willard and Co., Ltd., £3,531; Chas. S. Foster and Sons, Ltd., £3,724.

Luton, Beds.—Construction of concrete piles, pile caps, ground beams and ground floor slab and river culvert in reinforced concrete for new central library for B.C.—Concrete Piling, Ltd., London, S.W.1, £40,918; sub-contractor for reinforced concrete pile foundations—H.D. Foundations, Ltd., £14,231 (allowed for in main tender).

Macclesfield, Ches.—Extensions at King's School, including the rebuilding of the assembly hall for the School Governors—Cooper Bros. and John Clayton, Ltd., Catherine Street, Macclesfield, £50,564.

Market Rasen, Lincs.—Construction of a covered accommodation at Market Rasen Racecourse—F. A. Woud, Ltd., Bourne Lane, Ladysmith Road, Grimsby. Estimated cost £30,000. Work just commenced.

Middlesbrough, Yorks.—Erection of St. Mary's College (second stage) for E.C. Thomas A. Crawford, architect, 80 Borough Road, Middlesbrough—Hudson Bros. Fidler Street, Middlesbrough, £104,256.

Mitcham, Surrey.—Extensions to provide six practical rooms at the Western County Secondary School for Co. E.C.—R. H. Lynn and Co., Ltd., 209 Whitehorse Road, Thornton Heath, £37,540 (recommended).

Newbury, Berks.—Laying of a maple wood floor at the corn exchange for B.C.—Horsley, Smith and Co. (Hayes), Ltd., Dawley Road, Hayes, Middx, £995.

Newcastle upon Tyne.—Reconstruction of shop premises at 36-44 Scotswood Road for H. C. Troldahl, Ltd., E. M. Lawson, architect, Barras Buildings, Barras Bridge, Newcastle—Cussins (Contractors), Ltd., The Drive, Gosforth.

Newcastle upon Tyne.—Erection of garages, as follows for City Council—Four, Wyndham Avenue, Montagu estate, seven, Crossways, Montagu estate; 17, Fairways Avenue, Fairways estate, six, Edenbridge Crescent, Longbenton estate (unit 3), 10, Wasdale Road, Slatyford Lane estate—R. C. Comb, 40 Esplanade, Whitley Bay, £670, £1,132, £2,451, £1,011 and £1,394, respectively; seven, West Farm Wynd, Longbenton estate, (unit 4)—J. W. and E. Charlton, West Burn, Crawcrook, £1,121; 17, Cairns Way and four, Amherst Road, Fawdon estate—R. Dodd, 10 Westmorland Avenue, Willington Quay, £3,168; 12, Hillsview, Kenton North estate—J. Holdsworth and Co., 48 Earston Road, Whitley Bay, £1,440 (all recommended).

Northallerton, Yorks.—Erection of swimming baths for the War Memorial Baths Committee. Mortimer Partners, architects, Ainderby Hall, Northallerton—Walter Thompson (Contractors), Ltd., North End, Northallerton.

Nottingham.—Following for City Council: Erection of a branch library at Bramcote Lane, Wollaton—Progressive Builders, Ltd., Lowater Street, Carlton Street, Nottingham, £15,680; asphalt roofing at additional floor over block fronting North Church Street—Unity Asphalt Co. (London), Ltd., 373 High Street, London, E.15, £1,224; construction of children's conveniences and shelter at Seaford Avenue Children's Playground—Grain and Westley, £1,515; minor repairs at several hostels—Turley Bros., £1,029; conversion of classrooms to provide

housecraft room and two classrooms at Farnborough Secondary School—G. A. Pillatt and Son, Ltd., Quorn Road, off Haydn Road, Nottingham, £3,182 (recommended).

Paddington.—Following for B.C.: Repairs and painting to libraries—Buckingham and Sons, Ltd., 45 Vivian Avenue, London, N.W.4, £1,436 (recommended).

Repairs and maintenance at the Porchester Hall and Porchester Baths and boilerhouse—T. H. Kenyon and Sons, Ltd., Chancellors Works, Croxley Road, W.9, £2,147.

Plymouth, Devon.—Following for City Council: Erection of a factory at Burrington estate for Griffin and George (Scientific Instruments), Ltd.—Dudley Coles, Ltd., Bath, Plymouth, £131,203; pilot factory at Stonehouse—George Wimpey and Son, Ltd., 36 Hammersmith Grove, London, W.6, £17,584 (recommended).

Prescot, Lancs.—Erection of supermarket on the Limehouse Cinema site for Lennon's (Retailers), Ltd., 1 and 3 Ormskirk Street, St. Helens—Norman Astbury, 73 Hamer Street, St. Helens.

Redhill, Surrey.—Adaptations at St. Matthew's C. of E. Primary School for Co. E.C.—G. F. Mackrell, Ltd., Garlands Road, Redhill, £1,456 (recommended).

Rickmansworth, Herts.—Erection of a Civil Defence Centre for C.C.—Woodside Builders, Ltd., 92 Cecil Street, Watford, £7,926 (recommended).

Roxburghshire.—Erection of a new school at Lilliesleaf for E.C. W. F. Milne, county architect: Mason and brick—J. Pennycooke and Co., Croft Road, Hawick; joiner—Wm. Hogg, 25 Kirk Wynd, Selkirk; glazier—G. Kirk, Ltd., 20 Cook Street, Glasgow, C.5; plumber—J. Miller and Son, O'Connell Street, Hawick; slater—Wm. Marjoribanks, St. Boswells; plaster—Wm. Marjoribanks, St. Boswells; electrical—The Electric Shop, 21 High Street, Hawick; heating—Taylor and Fraser, Ltd., 22-24 Nasmyth Road North, Hillington, Glasgow. Estimated cost £22,471.

St. Neots, Hunts.—Improvement of amenities in 253 pre-war Council houses for U.D.C. The work will be divided into three parts—plumber, electrician and general builder—although the works in each part will not necessarily be common to all the houses in the scheme. S. D. Cox, engineer and surveyor. General builder—G. Burcroft and Sons, Ltd., Huntingdon Street, St. Neots, £1,551; plumber—S. J. Stamford, Priory Road, St. Neots, £6,941; electrician—Barford Electrical Services, Little Barford, St. Neots, £2,820.

Southwark.—Construction of block 1, comprising offices and shops, as part of the first stage of development of the Draper Street site in the Elephant and Castle comprehensive development area for L.C.C.—Walter Lawrence and Son, Ltd., 31 Sun Street, London, E.C.2, £191,472 (accepted); Wates, Ltd., £195,087; M. J. Gleeson (Contractors), Ltd., £198,299; Y. J. Lovell (London), Ltd., £199,273; Leslie and Co., Ltd., £199,671; W. J. Simms, Sons and Cooke, Ltd., £205,041; Bernard Sunley and Sons, Ltd., £206,451; Rowley Bros., Ltd., £207,403; Thomas and Edge, Ltd., £208,350.

Steoney.—Restoration and adaptation of the chapel at Trinity almshouses, Mile End Road for L.C.C.—Griggs and Son, Ltd., 56 Victoria Street, London, S.W.1, £22,399 (accepted); Galbraith Bros., Ltd., £22,460; Norman and Burt, Ltd., £22,517; Dove Bros., Ltd., £22,767; Ashby and Horner, Ltd., £23,300; John Mowlem and Co., Ltd., £26,797.

Stepney.—External redecoration works at various properties for B.C.—George Jones and Son (Contractors), Ltd., £6,230 (recommended).

Stretford, Lancs.—Painting number of street lamps for B.C.—main road lighting and control pillars—R. Hooton and Son, Ltd., 16 Church Street, Mold Green, Huddersfield, £505; side street standards—Hardwicks (Manchester), Ltd., 80 Stockport Road, Manchester, 12, £416 (recommended).

Sunderland.—Factory extensions for Ericsson Telephones, Ltd., Newick and Blackbell, architects, 58 John Street, Sunderland—David Glen, Ltd., Albert Road, Jarrow, Co. Durham.

Surrey.—Extensions to provide additional residential accommodation and increased dining space at Merrist Wood Farm Institute for E.C.—R. Miller and Co., Ltd., 12 Pownall Gardens, Hounslow, Middx., £23,385 (recommended).

Sutton, Surrey.—Erection of a sports pavilion and groundsman's bungalow at the staff sports ground, Belmont for L.C.C.—Burnard and Pickett, Ltd., Wallington, Surrey, £29,966 (accepted); Siegs and Chapman, Ltd., £30,788; R. H. Lynn and Co., Ltd., £31,150; Grace and Marsh, Ltd., £31,243; Croudace, Ltd., £31,758; Truett and Steel,

Ltd., £32,860; M. J. Gleeson (Contractors), Ltd., £33,786.

Tynemouth, Northumb.—Additions to St. Anselm's R.C. Secondary Modern School. David Brown, architect, 10 Lambton Road, Jesmond, Newcastle upon Tyne—Tate and Holmes, Benwell, Newcastle upon Tyne, £10,000.

Uttexeter, Staffs.—Alterations and extensions to the Town Hall for U.D.C.—Wilcox Bros., Draycott Road, Tean, Stoke-on-Trent, £13,295.

Walton-on-Thames, Surrey.—Improvement to science facilities at Rydens County Secondary School, Hersham for Co. E.C.—H. C. Harmes and Sons, Ltd., 1 Cleveland Close, Hersham Road, Walton-on-Thames, £4,087 (recommended).

Ware, Herts.—Erection of phase 2 of Ware Secondary Modern School for C.C.—Ekins and Co., Ltd., Great Northern Works, Hertford (recommended, extension of contract).

Warrington, Lancs.—Erection of supermarket on the Royal Court Theatre site for Lennon's (Retailers), Ltd., 1 and 3 Ormskirk Street, St. Helens—Norman Astbury, 73 Hamer Street, St. Helens.

Wellingborough, Northants.—Improvements to pre-war Council houses for U.D.C.: 109 at Henshaw Road—F. Armstrong, 47 Midland Road, Wellingborough, £3,653; (a) 92 at Mannock Road and (b) 54 at Birchfield Road and 10 at Weavers Road—Brooks-Hyett and Co., 1 Palmerston Road, London, E.17, (a) £2,211 and (b) £2,441; 62 at Ashfield Road—Beeby and Cox, 2 Regent Street, Wellingborough, £2,388.

Welwyn Garden City, Herts.—Supply of four mobile classrooms for Welwyn Garden City Grammar School for C.C.—Robert H. Hall and Co. (Kent), Ltd., Paddock Wood, Kent (recommended).

Westminster.—Erection of a multi-storey parking place and petrol filling station at 5, 6 and 7 Audley Square and 5, 6 and 7 Waverton Street for City Council. Frank Risdon, architect, 47 Bedford Row, London, W.C.1—Bernard Sunley and Sons, Ltd., 25 Berkeley Square, S.W.1, £223,125 (recommended); Holland & Hannen and Cubitts, Ltd., £223,926; John Laing and Son, Ltd., £224,985; John Mowlem and Co., Ltd., £241,197; Richard Costain, Ltd., £250,284; Demolition and Construction Co., Ltd., £272,212.

Wigan, Lancs.—Erection of supermarket in King Street for Lennon's (Retailers), Ltd., 1 and 3 Ormskirk Street, St. Helens—Norman Astbury, 73 Hamer Street, St. Helens.

Wirral, Ches.—Repainting of 33 group A and 197 group B type metal street lamp columns in various roads, contract 273 for U.D.C. E. Mellor, engineer—Bagshaws (Contractors), Ltd., 83 Jackroyd Lane, Newsome, Huddersfield.

Woking, Surrey.—Construction of The Hermitage County Primary School for Co. E.C.—R. J. Stagg, Ltd., 28 Duncombe Road, Godalming, £51,340 (recommended).

DEMOLITION

Fulham.—Demolition of following for B.C.: 2 May Street—A. A. Wav. 133 Randall Avenue, London, N.W.2, £35; premises in Field Road area—F. W. P. Dyett, £240 (both recommended).

Gosport, Hants.—Demolition of three garages at Willow Place for B.C.—John Hunt, Ltd., Cleveland Road, Gosport, £25 (recommended).

Halesowen, Worcs.—Demolition of 70-74 Intended Street, Cradley, 1 Barrack Lane, Cradley, workshop at rear of 20 and 22 Hagley Road, Halesowen, and 69, 71 and 73 Stourbridge Road, for B.C. T. W. Tivey, borough surveyor—J. Chapman, 203-209 Balsall Heath Road, Balsall Heath, Birmingham, 12. Work commencing August.

Leamington Spa, War.—Demolition of 6 and 7 Oxford Row for B.C.—Rainsford and Son, Arch. 36, Bath Place, Leamington Spa, £93 (recommended).

Mitcham, Surrey.—Demolition of air-raid shelters at Rowan County Secondary Boys' and Girls' School for Co. E.C.—Ebenezer Mears and Son, Ltd., 86 Chertsey Road, Byfleet, £724 (recommended).

Newbury, Berks.—Demolition of 44-54 Capel Street, Thatcham, and 12-19 Green Lane for R.D.C.—D. Marder, Oxdrove, Andover, £35 and £20, respectively.

Nottingham.—Demolition of 3-44 Pleasant Row, Hyson Green area for City Council—M. Cunningham and Son, Ltd., 30 Brighton Road, Birmingham, 12, £950 (recommended).

Raynes Park, Surrey.—Demolition of air-raid shelters at Joseph Hood County Secondary School for Co. E.C.—Ebenezer Mears and Son, Ltd., 86 Chertsey Road, Byfleet, £119 (recommended).

Woolwich.—Demolition of 63 and 64 Bedf ord Street for B.C.—A. Penfold and Sons, Ltd., 78 Blackheath Hill, London, S.E.10, £135 (recommended); J. W. Doye and Co., Ltd., £165; E. W. Spears and Co., Ltd., £185; W. H. Penfold and Sons, Ltd., £193; Gorst and Co., Ltd., £237; Chas. Griffiths, Ltd., £288.

ELECTRICAL

Belfast.—Electrical installation at dining room extension to Maldon Street School meals kitchen for City Council. McCauslan and Abbott, engineers, 16 Bedford Street—A and C Electric, Ltd., 8, College Square East, Belfast. Work expected to start in November.

C.E.G.B.—The Central Electricity Generating Board have placed contracts during the past month for power stations, transmission lines and transforming stations amounting in the aggregate to approximately £4,930,000. The principal contracts include:

Thorpe Marsh power station (near Doncaster): 415-volt switchgear, switch-fuse gear, motor control gear, and accessories—The English Electric Co., Ltd.

High Marnham power station (near Newark): scrapers for coal handling—John Blackwood Hodge and Co., Ltd..

Skelton Grange B power station (near Leeds): three site shunting locomotives—The Yorkshire Engine Co., Ltd.; canal barge coal-unloading plant—Clyde Crane and Engineering Co., Ltd.

Blyth B power station: booster, starting and standby boiler feed pumps for 7 and 8 350-MW turbo-generators—Sulzer Bros. (London), Ltd.

Rugeley power station: 3.3-kV air-break 150-MVA switchgear—A. Reyrolle and Co. Ltd.; 415-volt contactor switchgear—Brookhirst Igranic, Ltd.

Uskmouth B power station (near Newport, Mon.): one 144-MVA, 13.8/145.4-kV transformer 3—The General Electric Co. Ltd.

Aberthaw power station (near Barry): 6.6-kV, 250-MVA switchgear and accessories—Associated Electrical Industries Ltd.

Richborough power station: instruments and control equipment—Electroflow Meters Co., Ltd.

Brunswick Wharf power station: uprating 132-kV switchgear—Associated Electrical Industries, Ltd.

Kirkby 132-kV sub-station: 132-kV outdoor switchgear—Associated Electrical Industries Ltd.

High Marnham sub-station: one 400-MVA, 380/275-kV auto-transformer—The English Electric Co., Ltd.

Monk Fryston sub-station: one 400-MVA 380/275-kV auto-transformer—Ferranti, Ltd.

Corby sub-station: two 180-MVA, 275/132-kV transformers—The English Electric Co., Ltd.

Bustleholme sub-station: two 180-MVA, 275/132-kV transformers—The General Electric Co., Ltd.

Brinsworth sub-station: 275-kV, 7,500-MVA switchgear—Associated Electrical Industries, Ltd.

Nechells sub-station: 132-kV, 3,500-MVA switchgear—The General Electric Co., Ltd.

Brinsworth sub-station—275-kV overhead lines—British Insulated Callender's Cables, Ltd.

Rugeley-Whitfield: 132-kV overhead line—Associated Electrical Industries, Ltd.

Ironbridge-Oswestry: 132-kV overhead line—Balfour Beatty and Co., Ltd.

Hart Moor sub-station: civil works—Tarslag, Ltd.

Whitson (Newport Steelworks) sub-station: site and foundation works—A. Jackaman and Son, Ltd.

Willesden Grid-Taylor's Lane: 132-kV and 33-kV cabling—Pirelli-General Cable Works, Ltd.

Basildon-Pitsea: 25-kV cabling—British Insulated Callender's Cables, Ltd.

Hertfordshire.—Provision of new self-closing gates for four passenger lifts at County Hall for C.C.—Maryrat and Scott, Ltd., 40 Hatton Garden, London, E.C.1, £770 (recommended).

Ishington.—Major electrical works at Halton Mansions for B.C.—Evans and Shea, Ltd., 21 Victoria Road, Romford, Essex, £13,000 (recommended, negotiated tender).

Nottingham.—(a) Extension of passenger lift, and (b) installation of electrical services for additional floor over block fronting North Church Street for City Council—(a) Evans Lifts, Ltd., 20 Bradbourne Avenue, Wilford, Nottingham, £911 and (b) East Midlands Electricity Board, £1,821 (recommended).

Oxford.—Installation of a new bed lift at St. Mary's Hospital, Wallingford, for the

Oxford Regional Hospital Board—J. M. Jones and Sons, Ltd., Maidenhead, Berks. £1,557.

Woolwich.—Electrical installations to 72 dwellings at Strongbow Road site for B.C.—London Electricity Board, £13,100 (recommended, fixed-price tender).

FENCING

Bedfordshire.—Provision and erection of fencing on the B.557 Marston Village, C.70 Cranfield Depot, U.C.48 Duck End Farm, Stevington, and A.6 Clapham for C.C.—Durafencing (Birmingham), Ltd., 177 Kettering Road, Northampton, £669. Work commencing September.

Islington.—Supply and erection of following for B.C.: Weldmesh fencing at York Way Court—Supreme Fencing, Ltd., 10 Station Road, Watford, Herts., £401; chain link fencing and gates at garden sites at Giesbach Road—Boothby Road and 9-11 Bavaria Road—Permafence, Ltd., Beechwood Works, Taplow, Berks., £453; fencing at Dowry Street Playground—Permafence, Ltd., £390 (all recommended).

Leamington Spa, War.—Fencing land at Lillington for B.C.—Wyckham, Blackwell and Co., Ltd., Hampton-in-Arden, Solihull, £528 (recommended).

Newcastle upon Tyne.—Concrete panel fencing to boundary and sundry works, Benton Park Primary School for City Council—General Concrete Products, Ltd., Swalwell, Newcastle upon Tyne, £1,110.

Nottingham.—Fencing of school site and playing field at Fernwood Secondary School for City Council—Durafencing (Birmingham), Ltd., 34a Ulverley Green Road, Olton, Solihull, £2,423 (recommended).

GAS AND WATER SUPPLY

Biggleswade, Beds.—Sinking of two boreholes, 30in.-24in. diameter, through the greensand at Meppershall, contract I for the Biggleswade Water Board. Binnie, Deacon and Gourley, consulting engineers. Artillery House, Artillery Row, London, S.W.1—G. Stow and Co., Ltd., Reading Road, Henley-on-Thames, £16,320 (accepted); C. Isler and Co., Ltd., £17,988; F. Smith and Co. (Grimsby), Ltd., £18,520; Le Grand Adsco, Ltd., £18,730; Duke and Ockenden, Ltd., £25,116.

Dungannon, Tyrone.—Water extensions, contract 12 for R.D.C.: Munce and Kennedy, engineers, 133 University Street, Belfast—Norwest Construction Co., Ltd., Liverpool, £35,160 (recommended); Rafferty and Dobbs, £33,563; H. Coary, £33,697; R. J. Pattison Nutt and Sons, £38,992; J. A. Darragh, £42,422; White and Co., £43,040; P. Carvill and Sons, Ltd., £43,373; Farrans, Ltd., £60,271.

Dungannon, Tyrone.—Supply and laying water mains, contract 13 for R.D.C.: Munce and Kennedy, engineers, 133 University Street, Belfast—Rafferty and Dobbs, Carrickmore, Dungannon, £35,440 (recommended); H. Coary, £36,396; Norwest Construction Co., Ltd., £39,541; R. J. Pattison Nutt and Sons, £40,653; J. A. Darragh, £41,551; P. Carville and Sons, Ltd., £42,158; Farrans, Ltd., £65,377.

Hendon, Middx.—Gas carressing and the installation of Circulon gas water heaters in 52 flats at Bittacy Hill estate for B.C.—Ellis (Kensington), Ltd., 10 Kendrick Place, London, S.W.7, £2,971 (recommended).

Leamington Spa, War.—Second stage civil engineering works for the Campion Terrace waterworks scheme for B.C.—David Thomas and Hill, Ltd., 1 Chapel Street, Leamington Spa, £19,356 (recommended).

Ruthin, Denbighs.—Water supply scheme, contract II for R.D.C., comprising the laying of asbestos-cement water mains and construction of a service reservoir at Fron Heulog. Sir Herbert Humphries and McDonald, consulting engineers, Park Chambers, 276 Monument Road, Edgbaston, Birmingham, 16—Roger Hughes and Co., Ltd., Llysfaen Road, Old Colwyn, £32,981. Work has commenced.

Smallburgh, Norfolk.—Construction of a piped water supply scheme for Barton Turf for R.D.C.—W. A. G. Johnson, Hickling, £12,988 (subject to Ministry approval).

HARBOURS, PIERS AND SEA DEFENCE WORKS

Havant and Waterloo, Hants.—Sea defence works at Eastoke Corner, Hayling Island for U.D.C., comprising the construction of box groynes along a frontage of approximately 240yd., 50ft. wide, the construction of a concrete slipway and a short extension to the sea wall, and the construction of two conventional groynes. R. R. Hole, engineer and surveyor—Austen Shrives, Ltd., Orestan Lane, Essingham, Surrey, £13,304.

Newbiggin, Northumb.—Construction of a sea wall for U.D.C. R. T. James and Partners, consulting engineers, Clavering Place, Newcastle upon Tyne—Brims and Co., Ltd., Pandion Buildings, City Road, Newcastle upon Tyne, £93,000. Work about to commence.

HEATING AND VENTILATING

Bridlington, Yorks.—Improvements to heating installations at Bridlington School for East Riding E.C.—J. H. Shouksmith and Sons, Ltd., 132 Micklegate, York, £724.

Hendon, Middx.—Following for B.C.: Provision of seven isolating valves in connection with heating installation at Spur Road estate, for B.C.—George Wimpey and Co., Ltd., 26 Hammersmith Grove, London, W.6, £930; supply of two boilers for the Town Hall—Browning, Jones and Morris, Ltd., Brent Gasworks Sidings, North Circular Road, London, N.W.2, £1,361 (recommended).

Hertfordshire.—Improvement of heating and hot water services at St. Margaret'sbury Children's Home for C.C.: Eastern Heating Engineers, Ltd., £4,701 (recommended).

Middlesbrough, Yorks.—Heating plant for the Lartington rapid gravity filtration plant for the Tees Valley and Cleveland Water Board. Corporation Road, Middlesbrough—Brightside Engineering Co., Ltd., Lambton Road, Newcastle upon Tyne, £10,113.

Nottingham.—Following for City Council: (a) Installation of a ventilation system for the existing and new courts, and (b) installation of heating and hot water services at extensions to provide third magistrate's court, etc., at the Guildhall, (c) heating and water services for additional floor over block fronting North Church Street—Young, Austen and Young, Ltd., St. John's House, Shortwood Close, Canal Street, Nottingham, £2,395, £1,154 and £1,682, respectively (recommended).

HOUSING SCHEMES

Aldershot, Hants.—One hundred and forty-two two-bedroom bungalows at Deadbrook Farm, North Lane (private housing estate)—A. J. Wait and Co., Ltd., Wellington Crescent, New Malden, Surrey. Work just commenced.

Banstead, Surrey.—Twenty-four one-bedroom and 18 two-bedroom flats on the Pound Road estate for U.D.C.—R. J. Construction Co., Ltd., 2 Ashley Road, Epsom, Surrey, £65,629. Work commenced.

Bedford.—Twenty-four three-storey flats, 14 houses and six bungalows at junction of Lovell Road and Cardington Road, Eastcotts estate, for B.C.—W. J. Bushby, Ltd., 30 High Street, Kempson, Bedford, £94,609 (recommended, subject to Ministry approval).

Caistor, Lincs.—Sixteen dwellings, together with welfare accommodation, including warden's flat (all in one block) and site works, on a site adjacent South Dale and By-pass Road for R.D.C.—Wm. Saunders and Partners, architects, 24 Castle Gate, Newark-on-Trent, Notts., or 57 Upgate, Louth, Lincs.—Ingolby and Laver, Fern House, Tetney, £29,410.

Cheltenham, Glos.—Seven houses at Knightsbridge site, Elmstone Hardwicke for R.D.C.—F. and B. B. Griffiths, 144 Tewkesbury Road, Cheltenham, £13,638 (recommended).

Crewe, Ches.—Four hundred bungalows and cottage bungalows at Cherryfields, Broughton Lane, Wistaston—Bryant Estates, Ltd., 65 Whitmore Road, Birmingham, 10.

Durham.—Ten old people's bungalows at Bent House Lane for the City Council. L. E. Ellis, city engineer—H. F. Mole, Broadwood View, Chester-le-Street, Durham (subject to Ministry approval).

Goole, Yorks.—Ninety-eight houses and 12 garages at Old Goole for B.C.—George Wimpey and Co., Ltd., £135,826 (subject to Ministry approval).

Gosport, Hants.—Conversion of Queen's Lodge, Milvus Road, Lee-on-Solent, into 11 old people's flats together with warden's flat and communal lounge for B.C.—Hawkins Bros., (Gosport), Ltd., Westfield Road, Gosport, £10,725 (recommended, subject to Ministry approval).

Hendon, Middx.—Following for B.C.: 12 old people's flats in three blocks at The Chestnuts housing site 41, and four flats in one block at Elm Lodge housing site 47—Sellick Nicholls and Co., Ltd., Hill House, East Hill, St. Austell, Corn., £14,677 and £5,116 respectively; 42 flats, caretaker's flat, community hall, etc., at New Brent Street (phase III)—George Wimpey and Co., Ltd., 26 Hammersmith Grove, London, W.6, £52,563 (recommended).

Hungerford, Berks.—Eighteen houses at Park Way for R.D.C.—Cooke Bros., Ltd., 2 Park

Way, Newbury, £30,623 (subject to Ministry approval).

Keighley, Yorks.—Seventy-four dwellings on the Low Bank Lane estate, Oakworth for B.C. E. G. Felgate, borough architect, College Street—E. Turner, Ltd., Bradford Street, Keighley.

Loughborough, Leics.—Fifty-two houses at Ashby Road estate for B.C.—W. Davis and Co. (Leicester), Ltd., Forest Fields, Forest Road, Loughborough, £68,000 (recommended, subject to Ministry approval).

Luton, Beds.—Four hundred and seventy Easiform houses at Lewsey Farm estate for B.C.—John Laing and Son, Ltd., Mill Hill, London, N.W.7, £838,520 (subject to Ministry approval). Work commencing Oct. 1.

Newport, I. of W.—Eight blocks of flats comprising 32 units at Gunville for B.C.—Sheath Bros., Ferndale, Apse Heath, Sandown, I. of W., £43,144.

Northallerton, Yorks.—Twenty-two houses and eight flats at Forest Road estate for U.D.C. Brierley, Leckenny and Keighley, architects, 10 Lendal, York—R. B. A. Moody Bros. (Contractors), Ltd., 18 East Road, Northallerton, £49,035.

Oakham, Rutland.—Six bungalows together with site works, roadway, etc., at Empingham for R.D.C. Pick, Everard, Keay and Gimson, architects, 6 Millstone Lane, Leicester—J. S. Clark, 9 Penn Street, Oakham, £9,510 (accepted); E. Bowman and Sons, £9,650; Wheeler and Wright, Ltd., £9,992; Morton Potter, Ltd., £10,889; W. J. Roberts (Bottesford), Ltd., £11,342.

Standish-with-Langtree, Lancs.—Following works on the Broomfield housing site for U.D.C.: Contract 1—24 old people's bungalows, warden's flat and communal buildings; contract 2—construction of streets and sewers and site works for the above development—(1) J. J. Mason, 68 Arbour Lane, Standish, £33,144; (2) G. and J. Seddon, Ltd., Coronation Building, Little Hulton, Walkden, £4,911.

Stepney.—Construction on the Spring Walk areas and site of 87 flats in one 19-storey block, together with 37 tenants' stores, seven garages, parking space for nine cars and a play space for L.C.C.—Rush and Tompkins, Ltd., Sidcup, Kent, £232,553 (accepted); Bernard Sunley and Sons, Ltd., £232,791; Leslie and Co., Ltd., £233,390; Wates, Ltd., £235,850; Token Construction Co., Ltd., £236,617; Griggs and Son, Ltd., £238,500; M. J. Gleeson (Contractors), Ltd., £240,581; Richard Costain, Ltd., £241,580; J. Jarvis and Sons, Ltd., £241,989; Rowley Bros., Ltd., £242,938; Tersons, Ltd., £245,793; Wilson Lovatt and Sons, Ltd., £284,451.

Stretford, Lancs.—Six flats and two four-bedroom houses on the Gorse Street/Thomas Street/Chester Road site for B.C.—H. Daniels and Sons, 2 Midland Bank Chambers, Station Road, Urmston, £15,397 (recommended).

Ware, Herts.—Three pairs of police houses and garages at Tower Road for C.C.—G. Davies and Sons, (Broxbourne), Ltd., Hoddesdon Road, St. Margarets, near Ware, £15,604 (recommended).

Windermere, Westmor.—Thirty-seven houses on the Drömer Stile estate for U.D.C.—P. A. Baines and Sons (Northern), Ltd., The Brickworks, Culgaith, Cumb., £63,959.

Wombwell, Yorks.—Five blocks of flats near Bondfield Crescent and Wooley Avenue for U.D.C.—C. F. Ibbotson, Ltd., 11 Windmill Road, Wombwell.

Woolwich.—Sixty-eight dwellings and 20 garages on Heavitree Road sites for B.C.—Direct Labour, £127,440 (recommended); Thomas and Edge, Ltd., £133,032; Halsey and Sons, Ltd., £138,725; Wates, Ltd., £139,650; Kirk and Kirk, Ltd., £140,110; Y. J. Lovell (London), Ltd., £141,222.

PLANT AND MECHANICAL TRANSPORT

Bedford.—Supply of two road gritting machines for B.C.—Atkinson Agricultural Appliances, Ltd., Clitheroe, £800 ex works (recommended).

Harrogate, Yorks.—Supply of a 16 to 18 cu. yd. refuse vehicle and a 14 cu. yd. refuse vehicle for B.C.—Shelvoke and Drewry, Ltd., Letchworth, Herts., £2,595 and £2,452, plus in the case of the latter vehicle, £325 for a special compaction device (recommended).

Hendon, Middx.—Supply of the following for B.C.: One Austin 3-ton normal control chassis/cab with petrol engine and one 3-ton l.w.b. forward control dropside truck—Car Mart, Ltd., 374 Ealing Road, Alperton, Wembley, £967, less £20 allowance for existing s.w.b. Bedford-Pattison, and £831, respectively; one 2-ton s.w.b. tipper vehicle—Rootes, Ltd., Ladbrooke Hall, Barlby Road, London, W.10, £821, less

£30 allowance for Bedford lorry; International Drott machine with a 1 cu. yd. bucket with digging teeth—Saville (Tractors), Ltd., Staines Road, Feltham, Middx., £3,198, less £100 allowance for existing Chaseside shovel; four Lewin Sweepmaster mechanical sweepers with Perkins P.4 diesel engine—Lewin Road Sweepers, Ltd., Victoria Works, Hill Top, West Bromwich, Staffs., £12,012 (recommended).

PLAYING FIELDS, PARKS, ETC.

Chobham, Surrey.—Layout of land at Fowler's Wells, Wells Farm, as playing fields for Chobham County Secondary School for Co. E.C.—Kinman Contractors, Ltd., 4 The Broadway, London, W.6, £1,433 (recommended).

Malden, Surrey.—Laying out of playing fields at Manor County Primary School and at Tolworth Court for use by Challoner R.C. Secondary School for Co. E.C.—Grasshalte, Ltd., 90 High Street, Hampton Hill, Middx., £1,274, and Turfsoil, Ltd., The Cottage, Anchor and Hope Lane, Charlton, London, S.E.7, £2,577, respectively (recommended).

RAILWAY ENGINEERING

British Railways.—Following contracts placed: London Midland Region:

Shed offices and amenities at freight terminal, Watford—Leonard Fairclough, Ltd., 3 Chapel Street, Adlington, Lancs.

Waterproofing roof of 4 warehouse at Burton-on-Trent—Industrial Engineering, Ltd., Vogue House, Hanover Square, London, W.1.

Addendum contract for new bridge over Trent and Mersey Canal—Wilson Lovatt and Sons, Ltd., Clarence Street, Wolverhampton.

Cleaning, painting and repairs to roof of Manchester Central Station—Wilscaf, Ltd., Yarborough House, Huntingdon Road, York.

Supply and fabrication of steelwork for bridge 23 on Roade/Rugby (new) line—Richards Structural Steel Co., Ltd., Phoenix Ironworks, Leicester.

Heating, hot water services and ventilation at Motive Power Depot, Chester West—Ashwell and Nesbit, Ltd., Oxford Road, Manchester, 13.

Aerial survey of Bletchley—B.K.S. Air Survey, Ltd., Cleeve Road, Leatherhead, Surrey.

North-Eastern Region:

Provision of a 4,000-gallon water treatment plant for Gateshead Motive Power Depot—Paterson Engineering Co., Ltd., Glasgow.

Electrical installation work in new premises in Kidacre Street, Leeds, to be occupied by the district outdoor machinery engineer's staff—Albert Innes, Ltd., Queen Victoria Street, Leeds.

Provision of a high-speed shearing and nibbling machine for the research and development unit at Stoopendale, Darlington—Henry Pele and Co., Ltd., Osnaburg Street, London, N.W.1.

Stripping of reinforced concrete piles and excavation and construction of pile caps in connection with the new office building at Paragon Station, Hull—Quibell and Son, Ltd., 354 Beverley Road, Hull.

Extension of the north end traverser track foundation at York Carriage Works—F. Shepherd and Son, Ltd., Blue Bridge Lane, York.

Supplying, pitching, driving and extracting steel sheet piling in connection with the reconstruction of bridge 16 at Beningbrough, near York—Wellerman Bros., Ltd., Sheffield.

Removal of the shed roof at Springhead Motive Power Depot, Hull—E. Davis (Fixers), Ltd., Foss Islands Road, York.

Repairs to platform roof and removal of disused store at Hebdon Bridge Station—F. and J. Watkinson, 121 Fenby Avenue, Dudley Hill, Bradford, 4.

Improvements to houses 1 to 25, inclusive, Railway Terrace, Eaglescliffe—E. Dixon Barker and Son, Ltd., West Hartlepool.

Diversion of the River Tees in connection with the construction of the new marshalling yard at Lamesley—Derek Crouch (Contractors), Ltd., Station Road, Birtley.

Alterations to site for a lift and staircases well at Hull Paragon Station—Quibell and Son, Ltd., Hull.

Provision and installation of a 15-passenger lift at Hull Paragon Station—Etchells, Congdon and Muir, Ltd., Manchester.

Supply of steelwork for the reconstruction of bridge 39 at Beeston, near Leeds—Butterley Co., Ltd., Butterley, near Derby.

Building work in connection with the installation of a new passenger lift in the headquarters building at York—Sorrell (York), Ltd., York.

Installation of electric lighting, heating and power supply at Crofton Permanent Way Depot—Edmundsons Construction Co., Ltd., Leeds.

Painting of Darlington Bank Top and Northallerton Passenger Stations and certain other intermediate stations—T. E. Cundy, Ltd., Leicester.

Repair of isolated lengths of roadway in the Darlington district, including spraying—Northern Roadworks, Ltd., Darlington. Contracts for similar work in the York and West Riding districts have been given to Ibmac, Ltd., Bradford.

Scottish Region:

Resurfacing Rue End Street crossing Greenock—Kings and Co., Ltd., Glasgow.

Heating of staff accommodation and maintenance pit extensions, Leith Central diesel depot—Chas. Ritchie and Co., Ltd., Edinburgh.

Precast concrete beams for new underbridge, Kilwinning by-pass road—Costain Concrete Co., Ltd., Wishaw.

Construction of new signal box, Stanley Junction—P. Graham and Son, Bankfoot, Perth.

Reconstruction of overbridge 60 and removal of overbridge 1, Castle-Douglas—James Miller and Partners, Ltd., Edinburgh.

Renewal of rail track and roadway, Whiteinch tramway, Glasgow—R. Caldwell and Co., Glasgow.

Electric lighting installation, goods shed and yard buildings, Sighthill new goods depot, Glasgow—Sturrock Power Installations, Ltd., Dundee.

Glasgow Suburban Electrification: Train indicator equipment, Queen Street low-level station, Glasgow—Standard Telephones and Cables, Ltd., Enfield, Middx.

ROADS, BRIDGES AND SITE WORKS

Barnsley, Yorks.—Surfacing works for Laithes Lane improvement for B.C.—John Hinchliff and Sons Ltd., Barnsley Road, South Elmsall, Pontefract, £1,526 (recommended).

Basildon, Essex.—Highway improvement, junction of Perry Street and Mountnessing Road, Billericay, for U.D.C.—W. and C. French, Ltd., 215 Brentwood Road, Romford, £11,365.

Chislehurst-Sidcup, Kent.—First stage of the widening of Chislehurst High Street for B.C.—Percy Bilton, Ltd., 113 Park Street, London, W.1, £16,600.

East Retford, Notts.—Construction of roads and sewers at the West Hill estate, Ordsall.

ALLEN WHEEL TRENCHER
140
MODEL



“FAST” TRENCHING

Combining speed of digging with dependability, the “140” has a range of traction speeds from .5 to 37.3 ft. per minute, and will cut clean, fast trenches, 17½ in. to 30 in. wide, to a maximum depth of 5 ft. 6 in.

16 in. smooth crawler tracks, with cleats, give a ground pressure of only 5.7 lbs. per sq. in.

Full details from U.K. manufacturers and distributors:

JOHN ALLEN & SONS (OXFORD) LTD., Cowley, Oxford

for B.C.—Herbert Ashley, Sheepbridge Lane, Mansfield.

Farnham, Surrey.—Bridgefield private street works for U.D.C.—Surface Maintenance Services, Ltd., Durham House, 124 Old Christchurch Road, Bournemouth, £3,880.

Goole, Yorks.—Repairs to Boothferry Bridge for the West Riding C.C.: Timber works—C. Camping (Goole), Ltd., Bridge Street, Goole, £767; steelworks—Cleveland Bridge and Engineering Co., Ltd., Smithfield Road, Darlington, £630 (subject to Ministry approval).

Gosport, Hants.—Following for B.C.: Construction of the North Relief Road—Warings (Contractors), Ltd., London Road, Hilsea, Portsmouth, £64,730; bitumen surface dressing—Anglo-American Asphalt Co., Ltd., 83 Kingsway, London, W.C.2, 1s. 9d. per gallon (recommended).

Halesowen, Worcs.—Construction of private street works, Slade Road, Cradley for B.C. T. W. Tivey, borough surveyor—Ward and Binks and Co., Ltd., 66 Wolverhampton Road West, Bentley, near Walsall. Work commencing Sept.

Hampshire.—Trunk road A.30 improvement, Old Raven House, Hook, including earthworks, drainage, construction of carriage-way for C.C.—Surface Maintenance Services, Ltd., 124 Old Christchurch Road, Bournemouth, £19,732.

Havant and Waterloo, Hants.—Proposed roads off Elizabeth Road and Cunningham Road, Waterlooville for U.D.C., comprising the construction of approximately 3,230 sq. yd. of 6in. reinforced concrete carriageways, kerbing, surface water drainage and other ancillary works—Warings (Contractors), Ltd., London Road, Hilsea, Portsmouth.

Hazel Grove and Bramhall, Cheshire.—Following for U.D.C.: J. Fleming Andrew, engineer and surveyor, Making-up and completion of St. Michaels Avenue (part of), Bramhall—Apex Asphalts, Ltd., Owen Street, Stockport, £2,257; reconstruction of footpaths in Hazel Grove, comprising 2,400 sq. yd. of reflagging, 1,900 lin. yd. of rekerbing, and ancillary works—G. and E. Robinson Bros., 22 Northern Grove, West Didsbury, Manchester, 20, £4,397.

Hendon, Middx.—Following for B.C.: Making-up of accommodation road at rear of Deans Lane and Hale Lane—Charles Carter (Childs Hill), Ltd., 119 Granville Road, London, N.W.2, £1,496; surfacing work at Rushgrove Avenue—Constable Hart and Co., Ltd., Lion House, Red Lion Street, Richmond, Surrey, £758; resurfacing at Hendon Wood Lane—Sparkes (Construction), Ltd., Ludlow Road, Feltham, £6,632; construction of a footpath at Ashley Lane—D. R. Paterson, Ltd., 33 Granville Road, London, N.W.2, £2,609; improvement of Wise Lane—Linney and McLaughlin, Ltd., 93 High Street, Barnet, Herts., £23,188; surfacing of Devonshire Road with Resmat 99 cold asphalt—W. F. Rees, Ltd., 54 Victoria Street, Westminster, S.W.1, £1,370; provision of lay-bys at Milesplin Hill and Goldbeaters Grove—Charles Carter (Childs Hill), Ltd., £987 and £706, respectively (recommended).

Hertfordshire.—Reconstruction and widening of the bridge carrying Water Lane, C.78, over the Grand Union Canal at King's Langley for C.C.—Aubrey Watson, Ltd., Quebec Road, Henley-on-Thames, £19,008 (recommended).

Heston and Isleworth, Middx.—Widening and improvement of Cranford Lane, Heston, for B.C.—Norman Hill, 174 Twickenham Road, Isleworth, £55,600 (accepted); A. A. Williams (Contractors), Ltd., £56,243; L. Goodall and Sons, Ltd., £56,173; John Sugrue and Sons, Ltd., £56,236; Donovan and Denny, Ltd., £57,389; Wilson's Surfacing, Ltd., £57,751; Sparkes (Construction), Ltd., £58,477; Willmett Bros., Ltd., £59,045; Soil Engineering and Contracting Co., Ltd., £59,128; Waywarden, Ltd., £59,362; Percy Bilton, Ltd., £60,130; William Old, Ltd., £60,324; Mannion Bros. (Harrow), Ltd., £60,925; Ruddock and Meighan, Ltd., £61,584; Austen Shires, Ltd., £63,368.

Huntingdonshire.—Great North Road reconstruction scheme, section 3c for C.C., comprising the construction of 24ft. dual carriageways, together with all ancillary works, on a two-mile length of the London-Edinburgh-Thurso trunk road, A.1, between Brampton Hut and Alconbury. R. E. C. Dorling, county surveyor—A. Monk and Co., Ltd., Padgate, Warrington, £194,759.

Islington.—Reconstruction of kerbs and footpaths at various roads for B.C.—Fitzpatrick and Son (Contractors), Ltd., 455 Old Ford Road, London, E.3, £54,563 (recommended).

King's Lynn, Norfolk.—Construction of roads and sewers at Mill Lane, Gaywood for B.C.

—J. L. Kier and Co., Ltd., Setch, King's Lynn, £15,704 (recommended).

Lancaster.—Construction of roads and sewers for City Market development for City Council—J. Johnson (Contractors), Ltd., Meeting House Lane, Lancaster, £6,465.

Morecambe, Lancs.—Extensions to the Municipal Caravan Camp on Westgate for B.C.—Joe Johnson, Ltd., Meeting House Lane, Lancaster. Estimated cost £4,221.

Newark-on-Trent, Notts.—Reconstruction of footways, etc., in 13 streets for B.C., consisting of laying approximately 3,500 sq. yd. flagging, 6,000 sq. yd. cold asphalt, 5,000 lin. yd. of kerb and channel. O. Ashworth, engineer—City Construction Co., Lincoln, £18,482 (accepted); International Development Co. (Notm.), Ltd., £19,070; Cecil Williamson and Co., Ltd., £20,321; Clugston-Cawood, Ltd., £23,108. Work to commence August.

Newport, I. of W.—Construction of roads, footpaths and sewers for eight blocks of flats at Gunville for B.C.—Direct Labour. Estimated cost £4,866.

Newton, Yorks.—Repair of Altofts Road for U.D.C.—Leake and Carney, Field Lane, Thorne, Wakefield, £5,686.

Rothwell, Yorks.—Laying of roads and sewers at Styebank Lane in connection with erection of houses for sale for U.D.C.—C. and F. Construction, Ltd., Newton Bar, Wakefield, £4,064.

Shenley, Herts.—Provision of vehicle parking space at Harperbury for Civil Defence Training Centre, Harper Lane for C.C.—G. Skinner and Sons, Ltd., rear of 8 Carter-hatch Lane, Enfield, £745 (recommended).

Southend-on-Sea, Essex.—Construction of roads (approximately 400yd.) and sewers at housing site 32 (Treecot Drive), and the extension of Kenilworth Gardens (approximately 250yd. dual carriageway), and surface water sewer and incidental works for B.C.—Stedmans (Contractors), Ltd., 8 Wangey Road, Chadwell Heath, Essex, £39,588.

Stevenage, Herts.—Construction of a dual carriageway road link some 2,000ft. long, between terminal roundabouts, together with five underpass bridges and prestressed concrete bridges over the main railway lines and the Great North Road (A.1), for Development Corporation. Rendel, Palmer and Tritton, consulting engineers, 125 Victoria Street, Westminster—James Miller and

TELEGRAMS: BYCO, EDINBURGH

TELEPHONE: CRAIGLOCHART 5225/6

BYARD (ENGS.)

SIGHTHILL INDUSTRIAL ESTATE

EDINBURGH

MANUFACTURERS OF :—

LARGE BORE STEEL PIPES
FOR
SEWAGE, WATER, GAS, OIL
AND FOUNDATION PILING

LONDON OFFICE:

20 GROSVENOR GARDENS, LONDON, S.W.1

Tel: Sloane 8111/2

— OTHER PRODUCTS —

STAINLESS STEEL
FABRICATIONSPIPEWORK INSTALLATIONS
FOR CHEMICAL, OIL,
NUCLEAR & GAS INDUSTRIESPRESSURE VESSELS,
STORAGE TANKS AND
ALL PLATE ASSEMBLIES

Partners, Ltd., Station Works, Pump Lane, Hayes, Middx., £241,615. Work has commenced.

Stockbridge, Yorks.—Roads and sewers for 227 houses, shopping, church and community centre sites for U.D.C.—Selleck Nicholls and Co., Ltd., Hill House, East Hill, St. Austell, Corn., £43,629.

Stretford, Lancs.—Following roadworks for B.C.: Chester Road, Seymour Grove and Moss Road—Wilson and Wilkinson, Ltd., 102 Bolton Road, Pendleton, Salford, £2,754, £1,706 and £1,748, respectively; Great Stone Road, King Street, Warwick Road North, Eleventh Street and Broseley Road and Edward Charlton Road—J. A. Utley, Ltd., Albany Road, Chorlton-cum-Hardy, Manchester, 21, £2,320, £3,048, £3,460, £1,135 and £777 respectively; Park Road and First Avenue—W. Snape and Sons, Clifton House, Clifton Road, Eccles, £9,889 and £2,846, respectively (all recommended).

Sunderland, Dur.—Following for B.C.: Site preparation works on the Deptford industrial redevelopment estate—Harbour and General Works, Ltd., Gateshead, £65,885; construction of footpaths on the Thorney Close estate—T. Lavelle, Old Penshaw, Sunderland, £16,492.

West Hartlepool, Dur.—Construction of roads and sewers on land west of Catcote Road and in the central redevelopment area for the B.C.: J. S. Miles, borough engineer—Direct Labour, £90,000 and £11,626, respectively.

Whitley Bay, Northumb.—Construction of road and sewers on the Foxhunters' estate for B.C.: E. Roberts, borough engineer—J. W. and S. Dorin, Grosvenor Drive, Whitley Bay, £2,802.

Windermere, Westmor.—Road and sewer construction on the Droomer Stile estate for U.D.C.—P. A. Baines and Sons (Northern), Ltd., The Brickworks, Culgaith, Cumberland, £10,105.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Beckton, Essex.—Construction of air mains and other work to provide an additional air-supply to the aeration channels of the old activated-sludge plant at the northern out-

fall works for L.C.C.—A. Waddington and Son, Ltd., North Circular Road, London, N.W.10, £55,393 (accepted); Fitzpatrick and Son (Contractors), Ltd., £61,366; William Press and Son, Ltd., £63,565; John Mowlem and Co., Ltd., £72,897; C. J. Sims, Ltd., £91,786; Higgs and Hill, Ltd., £96,909.

Castlerheath, Down.—Laying of approximately 515 lin. yd. of 9in. diameter earthenware sewerage pipes, etc., at Glencraig Park for R.D.C.—Alexander Christie, 9 Serpentine Road, Belfast, £4,328 (accepted); E. Thompson and Co., £4,525; Unit Construction Co., £7,840; A. J. Clancy, Ltd., £7,949.

Chandtonbury, Sussex.—Main drainage of Storrington, C50, contract 1, for R.D.C., comprising the construction of approx. 12,000 lin. yd. of 6in. and 9in. dia. sewers and rising mains, two sewage pumping stations and modifications to the existing sewage disposal works, the latter involving the construction of new inlet works, sedimentation tanks, filter beds, humus tanks, sludge digestion tanks, sludge drying beds, and other ancillary works. Howard Humphreys, consulting engineers, Victoria Station House, Victoria Street, Westminster, London, S.W.1—William Old, Ltd., Harrow, £177,222 (accepted, subject to Ministry approval); Bridgwater Bros., Ltd., £179,204; Ruddock and Meigham, Ltd., £196,173; A. Streeter, £182,536; Tilbury Construction Co., Ltd., £193,722; Mears Bros., Ltd., £204,179. Work commencing Sept.

Downpatrick, Down.—Construction of south-east trunk water main, second contract for R.D.C.—R. Hughes, Ballygarvin, Kircubbin, £23,360 (recommended).

Dungannon, Tyrone.—Castaletcaufield sewerage, contract 1 for R.D.C. Munce and Kennedy, engineers, 133 University Street, Belfast—H. Coary, Dungannon, £3,023 (subject to Ministry approval). Work expected to start in Sept.

Gillingham, Kent.—Laying of a combined and foul sewer from Station Road to Twemlow Estate, Rainham for B.C.—J. J. Curran, Ltd., 64 Archway Road, Highgate, London, N.19, £28,049.

Hendon, Middx.—Construction of sewer at Copthall playing fields for B.C.—D. R. Paterson, Ltd., 33 Granville Road, London, N.W.2, £4,093 (recommended).

Kerrier, Corn.—Construction of the following sewerage and sewage disposal schemes for R.D.C.: Harvey McGill and Hayes, consulting engineers, 8 Richmond Road, Exeter—(a) Village of St. Keverne, comprising the laying of 105 lin. yd. of 9in. spun-iron pipes and 412 lin. yd. of 9in. and 2,475 lin. yd. of 6in. glazed stoneware sewers, together with concrete manholes, construction of a sewage disposal works, consisting of detritus, settlement, storm water and humus tanks, filters, sludge drying beds, and all ancillary works—Gray Conoley and Co., Ltd., Islington Wharf, Penryn, £29,066; (b) village of Nancegollan, comprising the laying of 76 lin. yd. of spun-iron pipes and 1,335 lin. yd. of 6in. glazed stoneware sewers, together with concrete manholes, construction of a sewage disposal works, consisting of screening chamber, settlement and dosing tanks, filter, humus tank, sludge drying beds, and all ancillary works—A. H. Dingle, Ltd., Seton, Redruth, £10,936.

Leamington Spa, War.—(a) Scraping equipment and (b) construction of the humus tanks at the sewage works for B.C.—(a) Templewood Hawksley, Ltd., 177 Corporation Street, Birmingham, 4, £5,379 and (b) Ballasts, Ltd., Bentley Lane, Walsall, £29,250 (recommended).

Llandeilo, Carm.—Construction of Capel Hendre and Cwmffewrs sewerage scheme, contract 3, for R.D.C., comprising approximately four miles of sewers, consisting of 270yd. of 9in. diameter and 7,000yd. of 6in. diameter concrete and spun-iron pipes with flexible joints, together with manholes, house connections and appurtenant works. Norman E. Evans, engineer—Williams Bros., Swansea Road, Pontardawe, Swansea, £32,468. Work to commence August.

Nantwich, Ches.—Construction of a 6in. diameter sewer at Butterton Lane, Oakhanger, for R.D.C.—J. Tinney and Sons, Ltd., Winsford, Ches., £791. Work to commence August.

Newcastle upon Tyne.—Sewer works for Walker redevelopment area and for Shieldfield and Pottery Bank multi-storey flats sites for City Council—Direct Labour, £2,120 and £1,770 respectively (recommended).

REX

- ★ HIGH DISCHARGE
- ★ WIDE SPOUTING RANGE
- ★ FAST WATER ENTRY
- ★ ALLOY STEEL DRUM & BLADES
- ★ AVAILABLE WITH POWER TAKE-OFF DRIVE

"Adjusta-Wate" Moto-Mixers

REX "Adjusta-Wate" Moto-Mixers make bigger profits for ready-mixed concrete operators. They carry greater payloads and their fast water entry and speedy charge-mix-discharge cycle cuts minutes off delivery times, enabling more trips per day to be made. Let "REX" bring a new economy to your ready-mixed concrete deliveries.



BLAW KNOX LTD

Box No 146 90/94 Brompton Road London SW3



More than 1000 Barber-Greene 840 Series Plants are operating around the world. Write for literature.

Single-aggregate continuous asphalt plant produces at high capacities

The Barber-Greene Model 840-B Continuous Asphalt Plant offers high-capacity production of single-aggregate mixes suitable for every type of paving job except those requiring screening after drying. The plant consists of the mixer, dryer and cold feeder. A fines feeder may be added if required. A hopper mounted on the mixer hot elevator automatically measures and feeds the correct amount of aggregate to the mixer.

Two dryers are available for use in this plant. The Model 839 produces capacities to 45 tons per hour and the Model 832 produces up to 55 tons per hour. Both offer greater capacity, more complete portability and lower maintenance than any dryers of the same cubage.

Jacklegs speed plant setup and eliminate the need for cribbing. The new, longer twin-shaft pugmill gives more thorough mixing, increased capacities. Aggregate flow is easily diverted into test bucket for feeder gate calibration. All plant components are mounted on pneumatic tires for fast truck towing. High pugmill discharge eliminates the need for truck pit or truck loading conveyor, or skip with storage hopper.

Aggregate and asphalt feeds are mechanically interlocked, assuring constant correct proportioning. Hydraulically operated pugmill discharge hopper allows plant to operate between trucks, helps prevent mix segregation during discharge.

Easily converted to multiple aggregate plant by adding a gradation unit. Write for information.

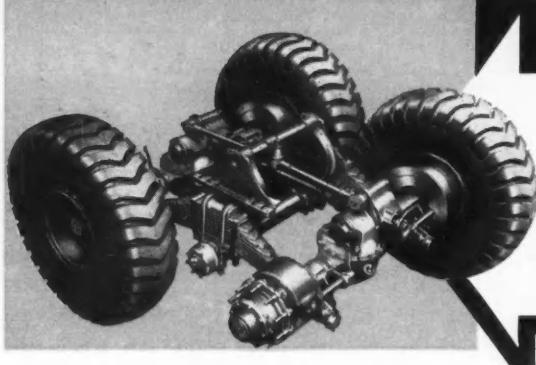
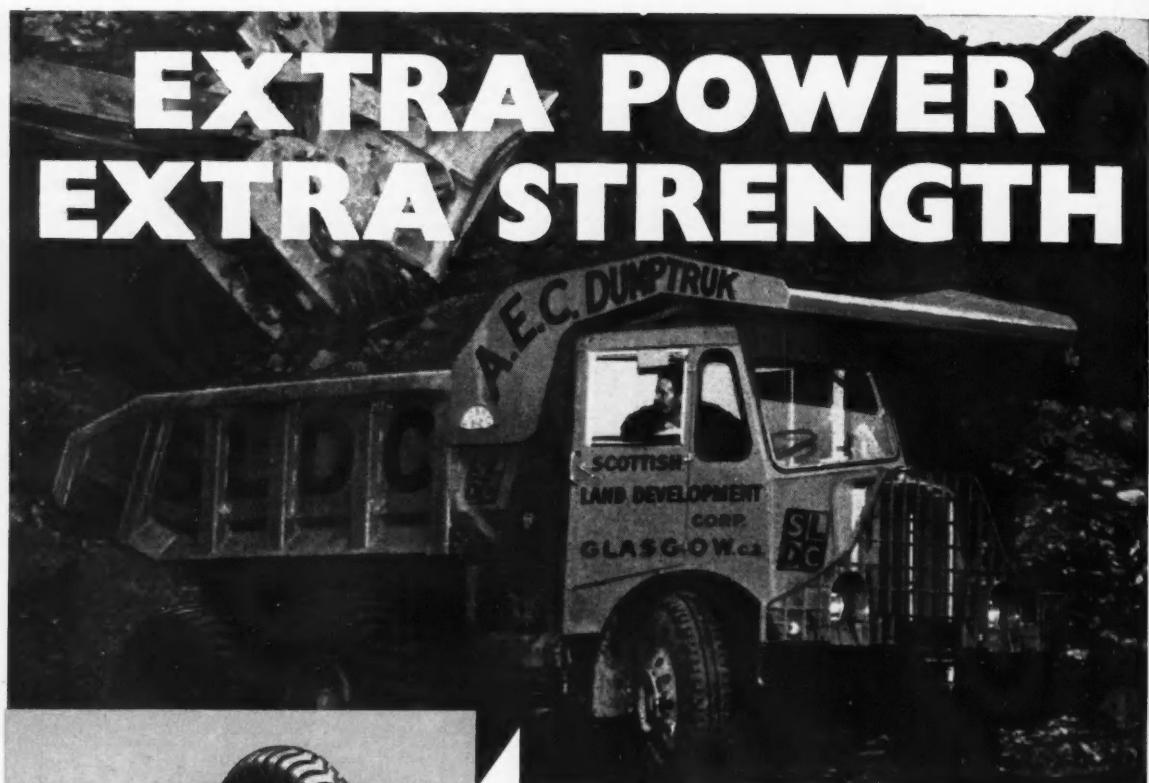
59-509-A

Barber-Greene



Distributors in the British Isles:
JACK OLDING & COMPANY LIMITED
HATFIELD · HERTFORDSHIRE

EXTRA POWER EXTRA STRENGTH



and **EXTRA
ARTICULATION**

The double-drive fully-articulated rear bogie is a unique feature of the A.E.C. "Dumptruk".

The tough, powerful, economical 10 cu. yd. A.E.C. "Dumptruk" does far more work in less time and gives a lower cost per yard moved than any other comparable dump truck on the market today. Powered by the field-proved 150 b.h.p. diesel engine with a high torque output driving through a specially developed constant mesh gearbox, the A.E.C. "Dumptruk" has the stamina to meet the most gruelling conditions. With double acting rams it reaches a 70° tip in 10 secs, with power return.



10 Cubic yard

DUMPTRUK

Designed, powered and built by
A.E.C. LIMITED · SOUTHALL · MIDDLESEX

Sole Concessionaires for the United Kingdom. SCOTTISH LAND DEVELOPMENT CORPORATION
72 Dykehead Street, Queenslie, Glasgow, E.2 & 32 St. James's Street, London, S.W.1.
Sales & Service Depts: Glasgow, Newcastle-upon-Tyne, Nottingham, London.



JOY'S INGENIOUS DUAL VALVE — GIVES YOU AIR TO SPARE

Exclusive to the Joy-Sullivan range of Speedline rock drills and concrete breakers is the Joy Dual Valve — responsible for the miserly air consumption and the great striking power which distinguish the Speedline from any other drill.

The Dual Valve admits *exactly* the right amount of air to each end of the piston to drive it back and forth at *exactly* the right time — preventing live air from softening the blow by shutting off the supply at the end of each stroke. At over 2,000 blows per minute this adds up to a lot of air saved.

Joy Speedline rock drills are available in the 35lb.—50lb. class, either handheld or with air-leg feed mounting. All are fitted with the exclusive Joy Dual Valve to get more work from less air.



*
Other important features of the Speedline rock drills are fully described in Publication AD/3



AIR POWER - SUPPLIED & APPLIED BY

AIR POWER
JOY-SULLIVAN LTD
DIVISION

7, HARLEY STREET, LONDON, W.1. TELEPHONE: LANGHAM 7711

RD/2

Strength-in a Big way!

Here is rugged strength to overcome the roughest, toughest conditions... tread patterns scientifically designed for every sort of operation... built-in dependability to keep your machines always on the job. You can rely on the DUNLOP Earthmover range of tyres to give you the utmost in long, trouble-free service. Whatever your machines and your operating conditions, there are tyres in the DUNLOP range specially built to do a first-class job for you!



DUNLOP

TYRES

-built better to last longer!

cm/uolm

Newmarket, Suffolk.—Burwell sewerage and sewage treatment works, contract 1 for R.D.C., comprising the construction of approximately seven miles of 7in., 9in. and 12in. glazed ware sewers, with precast concrete manholes, 5in. and 6in. spun-iron pumping mains, three pumping stations, a sewage treatment works, house connections and other appurtenant works. The treatment works include reinforced concrete sedimentation tanks, percolating filters, humus tanks, sludge drying beds, site roads, store building and fencing. H. Brompton and Partners, consulting engineers, 7 Hobart Place, London, S.W.1.—Derek Crouch (Contractors), Ltd., Peterborough, £168,385.

Nottingham.—Installation of No Flote control for three pumping stations at sewage disposal works extensions for City Council—Lee Howl and Co., Ltd., Tipton, Staffs., £1,057 (recommended).

Ringwood and Fordingbridge, Hants.—Burton and Winkton drainage, contract 1 for R.D.C. John Taylor and Sons, consulting engineers, Artillery House, Artillery Row, Victoria Street, Westminster, London, S.W.1.—Surface Maintenance Services, Ltd., Durham House, 124 Old Christchurch Road, Bournemouth, £11,524.

St. Austell, Corn.—Construction of 4,403 lin. yd. of 6in. concrete tube sewer at Ruddlemoor for U.D.C. H. G. King, engineer and surveyor—Gray, Conoley and Co., Ltd., Penryn, Corn., £25,179 (subject to Ministry approval).

Thringoe, Suffolk.—Fornham All Saints sewerage for R.D.C., including laying of approximately 300yd. of 9in. diameter glazed stoneware sewer and manholes, construction of a pumping station and garage block, and laying of a 3in. diameter pumping main in connection with the sewerage modification in the above village. S. M. Casson, engineer and surveyor—Edward J. Edwards, Ltd., Plumstead Road, Norwich, £4,846.

STREET LIGHTING

Bedford.—Lighting of various roads to group A and intermediate standards for B.C.—Machinery Installations, Ltd., 39 Corporation Street, Birmingham, 2, £1,336 (recommended).

Brownhills, Staffs.—Supply and erection of 67 group A reinforced concrete lighting columns and the supply and fixing of 67 250-W mercury vapour discharge lamps, lanterns and gear for U.D.C. C. H. Hunt, engineer and surveyor—Engineering and Lighting Equipment Co., Ltd., Sphere Works, Campfield Road, St. Albans, Herts., £2,368. Work commencing Sept.

Churchdown, Glos.—Erection of 94 lamp standards on the A.40 between Elmbridge

Court and the Plough Inn for Parish Council. Supply and installation of standards—Cohen Bros. (Electrical), Ltd., Electric House, 11 King Edward Buildings, Bury Old Road, Manchester, £4,963; supply of electrical equipment—General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2, £1,983; provision of cables—Midlands Electricity Board, £1,600.

Newcastle upon Tyne.—Two hundred and ninety-three colour corrected mercury vapour lanterns and control gear for City Council—General Electric Co., Ltd., Magnet House, Gallowgate, Newcastle upon Tyne, £3,635.

Paddington.—Concrete lamp columns and equipment for 1960-61 street lighting conversion programme from gas to electricity for B.C.—Engineering and Lighting Equipment Co., Ltd., Sphere Works, Campfield Road, St. Albans, £7,810 (recommended).

GOVERNMENT CONTRACTS

Air Ministry.—Contracts to the value of £500 or over for the week ended July 15:

Building works: Brampton Park, Huntingdonshire—A. J. G. Potter and Sons, Ltd., High Street, Stanwick, Wellingborough, Northants; Leconfield, Yorks.—J. Mather and Son, Ltd., Lead Road, Stoneferry, Hull, Yorks.; Middleton St. George, Co. Durham—F. Shepherd and Son, Ltd., Blue Bridge Lane, York; Lyneham, Wilts.—J. Jarvis and Sons, Ltd., 23 Vauxhall Bridge Road, London, S.W.1; Watton, Norfolk—Walter Lawrence and Son, Ltd., Ventnor House, London Street, Swaffham, Norfolk; Spitalgate, Lincs.—Bosworth and Wakeford, Ltd., Lawford Road, Rugby; Wattisham, Suffolk—Sadler and Sons, Richmond Road, Ipswich, Suffolk; Lerwick, Shetlands—William Tawse, Ltd., Angusfield, Aberdeen.

Roadwork reconstruction of overruns, etc.:—Wattisham, Suffolk—Roadworks (1952), Ltd., 57-61 Commercial Road, Ipswich, Suffolk.

Technical area site development: Fylingdales Moor, Yorks.—A. A. Stuart and Sons (Glasgow), Ltd., 10 Upper Grosvenor Street, London, W.1.

Artificers' work: Halton, Bucks.—Y. J. Lovell (Bucks.), Ltd., Marsham Lane, Gerrards Cross, Bucks.; Coltishall, Norfolk—Kyle Stewart (Contractors), Ltd., Ardshiel House, Empire Way, Wembley, Middx.; Horsham St. Faith, Norfolk—Kyle Stewart (Contractors), Ltd.; Hartlebury, Worcs.—Coleman and Tyas, Ltd., Victoria Road, Bidford-on-Avon, Alcester, War-

Painting work: High Wycombe, Bucks.—George Jones and Son (Contractors), Ltd., 278 Kensington Church Street, London, W.8.

Metropolitan Police.—Recent contracts placed include:

External painting and repairs and part internal redecorations, Clandon House, Kingsgate Avenue, Finchley—J. W. Cooper and Sons, £2,602.

External painting and repairs and part internal redecoration, Stoke Newington Police Station and section house—W. T. Ricketts and Sons, Ltd., £1,924.

External painting and internal redecorations, Kilmuir House, 5 Eaton Place, S.W.1—Apletree and Sons, £6,136.

Internal redecorations, Commissioner's Office, Receiver's Office, New Scotland Yard—South London Decorators, Ltd., £5,342.

Ministry of Works.—Contracts placed for week ended July 9:

Buckinghamshire: Post Office and Telephone Exchange, Beaconsfield—extension—Harry Chapples, Ltd., Highway Works, Post Office Lane, Beaconsfield.

Cambridgeshire: Post Office Motor Transport Workshops, Ely—erection—S. S. Ambrose and Son, Cambridge Road, Ely.

Dorset: Post Office, Shaftesbury—erection of motor transport workshops—Williams Bros. (Shaftesbury), Ltd., 7 Parsons Pool, Shaftesbury.

Kent: Telephone Repeater Station and Zone Switching Centre, Tunbridge Wells—erection—Lavender McMillan (Contractors) Ltd., 54 Cheam Common Road, Worcester Park, Surrey.

Leicestershire: Station Sorting Office, Campbell Street, Leicester—internal decorations—T. E. Cundy and Son, Ltd., 28 Belgrave Road, Leicester.

London: Admiralty, Rex House, Regent Street, S.W.1—internal decorations—South London Decorators, Ltd., 9-11 Streatham High Road, S.W.16; Colonial Office, 3 Sanctuary Buildings, Great Smith Street, S.W.1—internal decoration—South London Decorators, Ltd.; The Royal Mint, Tower Hill, E.C.3—internal decoration—C. and T. Painters, Ltd., Mordaunt Road, Hammersmith, N.W.10.

Renfrewshire: Telephone Exchange, Johnstone—erection—Thaw and Campbell, Ltd., 136 Paton Street, Glasgow, E.1.

Post Office.—Contracts for duct laying, etc., works to the value of £4,000 and over placed during the week ended July 16:

The Apex Contracting Co., Blanton, Bradford Road, Tingley, Wakefield, Yorks; The Norwest Construction Co., Ltd., Litherland, Liverpool, 21; John T. Pickard (Harrogate), Ltd., 168 Skipton Road, Harrogate, Yorks.; Alexander Thomson and Co. (London), Ltd., 45a Kensington High Street, London, W.8.

GEO. PIKE. LTD.
EQUIPMENT WORKS - ALMA STREET
BIRMINGHAM - 6.
BRANCHES AT
BELFAST, BRISTOL, CARDIFF, GLASGOW, LONDON,
MANCHESTER, PETERBOROUGH & STOCKTON
PLANT & TOOLS

VAL DE TRAVERS

FOR ASPHALTE • TARMACADAM • FELT ROOFING

LONDON • BARROW • BIRMINGHAM • CANTERBURY • EXETER • GLASGOW • LINCOLN • LIVERPOOL • MANCHESTER • NEWCASTLE



For Hire to Contractors



A large and comprehensive fleet of plant, in first-class condition, supported by a field maintenance service second to none. Thus, your worries are over when you
HIRE FROM ALLEN



Our fleet of machines consists of powered and towed graders, mobile and tracked excavators, grass rollers, sheepfoot rollers, road rollers of all types — 6½ cwt. to 16 cwt. vibratory and 2½ tons to 10 tons tandem and three-wheel, compressors, mixers, pumps, dumpers, etc., etc.



May we have YOUR enquiries?



JOHN ALLEN & FORD
(Oxford) LTD.
Long Lane, Littlemore, OXFORD

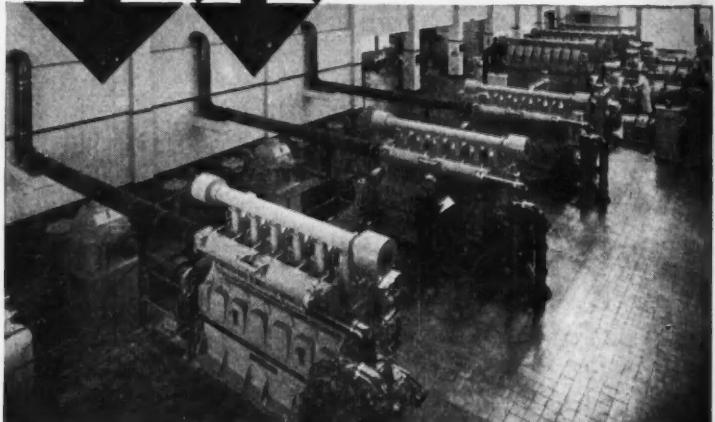
Tel: 78241/2/3
Wokingham Depot Tel: 75



Again the choice is 'English Electric'

The power house originally equipped by 'ENGLISH ELECTRIC' in 1957 is to be extended to meet additional demands. Two further 364 kW dual-fuel alternator sets will bring the number up to five supplying power to the works and workshops. Three existing 334 b.h.p. diesel engines at present driving storm flow pumps are to be converted into dual-fuel engines and coupled to new 240 kW alternators in addition to driving the pumps. Two motor-driven 3,500 cu. ft. per minute air compressors and a ten-panel double-tier air-break switchboard together with a separate control board and control desk are also being supplied.

Sponsoring authorities:
Harlow Development Corporation.
Chief Engineer to the Scheme:
E. A. Drew, B.Sc.(Eng.), A.M.I.C.E.
Joint Consulting Engineers:
*Messrs. J. D. and D. M. Watson,
Messrs. D. Balfour & Sons.*



ENGLISH ELECTRIC

diesel and dual-fuel engines
148 b.h.p. to 2504 b.h.p.

THE ENGLISH ELECTRIC COMPANY LIMITED, MARCONI HOUSE, STRAND, LONDON, W.C.2
Diesel Engine Division, Brownsover Hall, Rugby. Telephone: Rugby 3391

WORKS: STAFFORD · PRESTON · RUGBY · BRADFORD · LIVERPOOL · ACCRINGTON



FIRST CHOICE FOR FORESTRY

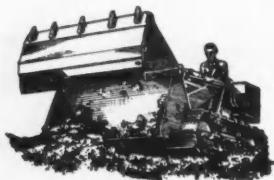
THE **COUNTY** CD-50

Full details and
specification from
your nearest Fordson
Main Tractor Dealer...
or write direct to us.

COUNTY COMMERCIAL CARS (SALES) LIMITED • FLEET • HANTS • ENGLAND

ACWORTH PLANT HIRE LTD.**FOR HIRE**

4 in 1 DROTT SKID SHOVELS
 DINKUM DIGGER MAJORS
 BRISTOL DIESEL DIGLOADERS
 3 cu. yd. MUIR-HILL DUMPERS
 PRIESTMAN CUB V EXCAVATORS
 VIBRATING ROLLERS 6½-30 cwt.
 "ROB ROY" SAW BENCHES
 MOBILE COMPRESSORS



**207 HIGH STREET,
 WALTHAM CROSS,
 HERTS.**

Telephone:
 Waltham Cross 26211-6

For Surveying Equipment**contact *****CHADBURNS**

Permanent display of levels and theodolites and surveying instruments by all leading British and Continental manufacturers in extensive Optical Showrooms.

Chadburns are appointed Area Stockists for
ZEISS - Western Germany
KERN - Switzerland
STANLEY - London

and North of England agents for:
SURVEY & GENERAL INSTRUMENT CO. LTD • LONDON W.C.1

LEVEL AND THEODOLITE REPAIRS A SPECIALITY

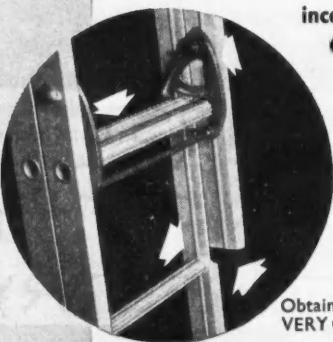
CHADBURNS (LIVERPOOL) LTD
 31 Brunswick Street, Liverpool, 2.
 Tel: CENTral 4844

Stephens & Carter—

The most experienced Ladder Makers (Est. 1840) announce

'STECALELOY'^{REGD}

ALUMINIUM LADDERS



incorporating new and revolutionary improvements

- Uniquely designed to ensure greater RIGIDITY, SAFETY, and easier working.
- POSITIVE rung-locking device.
- Deep ribbed rungs ensure secure foothold.
- Full-width top sections provide more standing space.
- Solid rubber feet at NO EXTRA CHARGE fitted to ends of all stiles.
- Aluminium construction ensures no rusting or rotting, easy handling and quick positioning.

Obtainable in standard single, double and triple sections.
 VERY COMPETITIVE PRICES. Brit. & For. Pats. Pending.

FILL IN THIS
 COUPON
 NOW!

STEPHENS & CARTER

To: Stephens & Carter Ltd.
 Please send fully descriptive and illustrated leaflet on your new STECALELOY LADDERS to:
 (enclose trade letter-heading or card).

NAME _____

ADDRESS _____

Armstrong
CORK COMPANY LTD.

WILL IT GO BACK INTO SHAPE?



The extent of recovery, the amount of extrusion under pressure—these are the main questions asked about a concrete expansion joint filler. Armstrong B.C. Joint Material is made from naturally resilient cork, resin-bonded and impregnated with bituminous material. There is very little extrusion under pressure, and the greatest possible recovery from compression. Armstrong B.C. joint filler resists the weather, petrol, oil, solvents, acid and alkali solutions, and has the ability to form a bond with the concrete. It is also suitable for use as load-bearing beam pads, screed underlays, and anti-vibration pads for machinery. Please write for full details.

Armstrong B.C. JOINT MATERIAL

ARMSTRONG CORK COMPANY LIMITED, INDUSTRIAL DIVISION, KINGSBURY, LONDON, N.W.9. COLINDALE 7080

ABC.I

The **NEW**
SIMPLITE
Mk 3 TRENCH PUMP



£75

**MUDY WATER, SLUDGE,
SCREENED SEWAGE,
CHEMICALS**

PETROL - HAND - ELECTRIC

UNIQUE SELF-PRIMING—NO FOOT VALVE REQUIRED

WM. R. SELWOOD LTD.

CHANDLER'S FORD, HAMPSHIRE. TEL: 2981

Marsh Barton Road, Exeter. Tel: 72375

COMPLETE PROTECTION

by

'WELFIT'

*Protective and
Industrial
Clothing
on
All Occasions*

Moleskin Jackets, Melton Donkey Jackets and Duffels

Hydex and PVC Waterproof Long Coats, Jackets, Overtrousers, Leggings and Sou'westers

• Write for Catalogue etc., to:

WELFIT MANUFACTURING CO. LTD.

CLOTHING DIVISION

HANSON LANE MILLS, HALIFAX

Phone: 66326

Telex 51235

FRANK

VALORI
LIMITED

A BIG NAME IN

DEMOLITION and EXCAVATION contracts

Having figured in many large contracts our staff of experts is fully equipped to carry out this specialized work efficiently and on time . . .

. . . EFFICIENTLY AND ON TIME

Remember these words when you're calling for tenders on your next project.

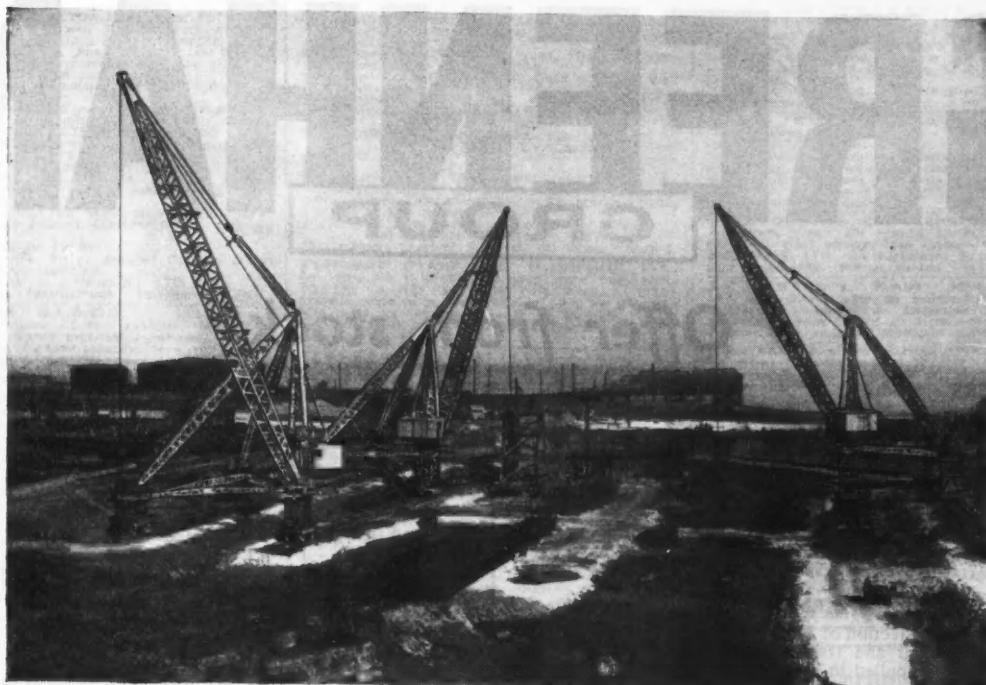
For a start put 'VALORI' on your list — you'll be more than satisfied with OUR WORK

Address:

**34 Christchurch Road
London, S.W.2**

Tel.: TULSE HILL 5656/7/8





HIRE ANDERSON CRANES FROM CASWELL

EXTENSIVE MODERN FLEET OF HAND, STEAM AND ELECTRIC DERRICKS FROM 15 CWT.—30 TONS CAPACITY WITH JIB LENGTHS UP TO 135FT.

AVAILABLE FROM DEPOTS AT LONDON AND BIRMINGHAM WITH COMPLETE ERECTION AND SERVICING FACILITIES.

CASWELL CRANES & ERECTION LTD.

GROVE WORKS, HAMMERSMITH, LONDON W.6. Phone: RIVerside 8922/5
AND
156 CHARLES HENRY ST., BIRMINGHAM 12. Phone: MID 7063/4

THE A.C. PLANT & HIRE CO. LTD.

TAYMOUTH WORKS, CARNoustie - Phone: CARNoustie 2215

THE GREENHAM GROUP

Offer from stock

DUMPERS

15cwt. Benford, Petter Diesel, excellent condition	£175
15cwt. Liner, Petter Diesel, excellent condition	£175
10B Muir-Hill 3 cu. yd., Ford petrol/paraffin. Very good order	£135

CONCRETE PLANT

14 cu. ft. Road Machines Double-bucket swing Weighbatcher, overhauled and repainted	£165
20-ton Portasilo overhauled and repainted	£350

MONO-RAIL EQUIPMENT

We have a large selection of Mono-Rail equipment in excellent condition. Power and trailer wagons, straight and curved rails, stands. Supplied in complete sets or as required.

VIBRATORS

Electric Vibrators 110/1/50	each £175
Allam Poker Vibrator, Electric, c/w flexible drive, and Poker head, very good condition	£25
Vibrosoil Compactors, J.A.P. petrol, excellent condition	each £125

HOISTS

7cwt. Wickham Mobile, J.A.P. petrol, c/w Platform and Masts	£90
---	-----

7cwt. Wickham Static, Petter Diesel, with Masts, good condition	£115
---	------

10cwt. Wickham Static, Ruston Diesel, c/w Platform and Masts, very good condition	£145
---	------

10cwt. Wickham Static, Electric Motor, c/w Platform and Masts, very good	£145
--	------

15/20cwt. B.H.C. Centre Slung, Petter Twin Diesel, excellent condition	£295
--	------

SHOVELS AND TRACTORS

Chaseside Loading Shovel, Ford petrol, excellent condition, well maintained	£150
Bray BL 25, 1 cu. yd. Tracked Loading Shovel, 1956. Diesel Engine. First-class condition	£1,650
Bray BL 430 Loading Shovel, 1959 Ford Diesel, little used. First class	£1,650

CRANES

Buildmaster 60/150 Tower Crane, 1953, Electric, 415/3/50.	Load 2½ tons	Hi/Lift 118ft.	Radius 23ft.
	1½ tons	110ft.	39ft. 3in.
	1 ton	76ft. 9in.	59ft.

£1,375

10-ton King Overhead Travelling Crane with 27ft. x 6in. x 16in. R.S.Js. Two electric motors, very good condition	£500
--	------

New Schwing KTK 28 W Climbing Tower Crane, Luffing Jib, Electric.	Load 3,100lbs.	Hi 69ft.	Radius 66ft.
	6,200lbs.	69ft.	33ft.

£4,950

Ex Stock Greenford	£190
--------------------	------

PUMPS

Johnson 2in. Villiers Petrol, Spring Mounted on Steel Base Plate	£45
Vac-Seal 5in. Centrifugal Pump, by International Combustion, 1954. Electric drive 400/440/3, capable of handling high proportions of solids	£190

£45

£190

MIXER BARGAINS

5/3½ Blaw Knox, Winget, Parker, Stothert and Pitt, Petrol, Steel or Tyred Wheels, first-class condition	each £85
10/7 Stothert and Pitt, Petter Diesel, Hopperfed, four steel wheels, working order	£95
10/7 Stothert and Pitt, Lister Diesel, Hopperfed, four steel wheels, first-class condition	each £195
10/7 Rex, Ruston Diesel, Closed Drum, Hopperfed, four steel wheels, first-class condition	£195
14/10 Rex, Electric 400-440/3/50. Four steel wheels, first-class	£475
14/10 Rex, Ruston Diesel, Closed Drum, Hopperfed, four steel wheels, first-class condition	£250
14/10 Rex, as above, but High Discharge, excellent	£275
21/14 Stothert and Pitt, Petter Diesel, Low Discharge, excellent condition	£300
Ransomes Roller Pan Mixer, Electric, four steel wheels, good working order	£65
4ft. 6in. Parker Roller Pan mixer, Petter Diesel, very good condition	£125

£45

£190

MISCELLANEOUS

Pegson Rammer, Series MRO, good condition	£27.10.0
---	----------

£27.10.0

Dalli Handscrapers, Sach Petrol, machine mounted on two wheeled trolley, first-class condition. Each	£245
--	------

£245

Parmanco Horizontal and Vertical Mobile Drill, Ford Petrol, 21 7ft. long Spiral earth extensions	£150
--	------

£150

4in. Hose Armoured Internally and Externally 12ft. long with couplings both ends	each £7.10.0
17/14 Westwood Grab, working order	£90
19RB Skimmer Bucket, only, very good condition	£75
19RB B/A Bucket only, very good condition	£80
33RB D/L Jib and Bucket	£125

£90

£75

£80

£125

GREENHAM EQUIPMENTS LTD.

CLAYTON ROAD, RUISLIP ROAD, GREENFORD, MIDDX.

Let's ring VIKING 3651



PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

(Continued from page 392)

FOR SALE. Foden 25-ton TRACTOR UNIT, Type FGTDG-25, with Tandem 18ft. well Trailer, knock-out back axle, air brakes, 1400 x 20 tyres, unladen weight 11 tons Bwt., 18lb. First registered late November, 1958, very low mileage, and in first-class condition throughout.

Several 10RBs, any equipment, Series 5000-10000. Good working order.

Several Ball DUMPERS, 3 cu. yd. Recently overhauled and in excellent condition.

International BTDG TRACTOR, fitted cab, Dozer Blade and hydraulics for scraper, approx. six months old.

4 cu. yd. Scraper, SCRAPER, Lister Diesel Engine, N.C.K. 304 EXCAVATOR, fitted 60ft. lib, audible warning device, 3 cu. yd. Dragline Bucket. Recently overhauled and in good working order. Year 1948.

N.C.K. 304 BACKACTER EQUIPMENT, nearly new. N.C.K. 304 FACE SHOVEL EQUIPMENT, in excellent order.

Several 50ft. JIBS for 10RBs.

Howard TRENCHER, 1958, powered Fordson Diesel Engine. Good condition.

HENRY J. FIRMAN, LTD., Newark Road, Peterborough. Telephone 5558.

SALE OR HIRE. P20 PORTASILOS. 20 tons capacity. New 1958.

P15 PORTASILOS, 15 tons capacity. New 1957. Very good condition.

DUDLEY VALE, LTD., Buckingham Place, London, S.W.1. Victoria 0252.

FOR SALE. Three C.P.T. 125 cu. ft. Diesel COMPRESSORS.

Good condition. Any reasonable offer considered. 21/14 S and P Diesel CONCRETE MIXER, Lister Engine, 1940, good, clean condition. £150. Tel.: RAVensbourne 1030.

FOR SALE. C.P.T. Two-stage COMPRESSOR, powered by Ruston 3-cyl. Hand-start Diesel Engine with hand-operated clutch mounted on two magnetic wheels. £150. GROCOKS AND DAY (PLANT HIRE), LTD., Mayfield Road, Leicester Tel. 58148.

FOR HIRE. Available immediate. 120ft. LIMA, fitted with genuine American 100ft. Crane Boom, Back Haul Gear, Bridle, etc., and in first-class condition.—PLANT SALES, LTD., 25 Castlereagh St., London, W.1. Telephone: Paddington 2663/5.

ROAD ROLLERS

FOR HIRE OR SALE

10 CWTS. to 10 TONS

with or without drivers

HALTRAC LIMITED

Bourne Works, Weimar St., S.W.15.

PUTney 4185

HERGARTH

HYDRAULIC MACHINERY SPECIALISTS

Main



Distributors

York C.B., E. and N.R. Yorkshire, and Lincs. New J.C.B. 4 Hydraulic EXCAVATOR, ex stock £2,525
New HOWARD SUPER TRENCHER, ex stock £2,575
PIPEPLAYER for same £40
New SHAWNEE POOLE 7 cu. yd. 9.9-ton DUMPER £2,100
J.C.B. Mark 1 EXCAVATOR.
1957-8 DROTT, complete with Hydraulic Loading Shovel £1,600
1959 HOWARD SUPER TRENCHER, as new £1,850
SHAWNEE EXCAVATOR, with Hydraulic Front Loading Shovel, Bulldozer Blade, Scarifier, on 1957 Fordson Major, 4-wheel drive. £1,200
ASTELL WATTS TRENCHER on Ferguson Diesel £650
FOWLER CHALLENGER I with 10ft. Hydraulic Blade o.n.o. £750
HOWARD 3ft. TRENCHER, with Fordson V.O. o.n.o. £400
All Reconditioned Machines sold under guarantee.
PART EXCHANGE AND HIRE PURCHASE.

Main Distributors for SHAWNEE POOLE:
York C.B. and E. and N.R. Yorks.

HERGARTH of YORK

Tel.: YORK 55181/2.

FOR SALE. Priestman Wolf EXCAVATOR, Serial A6346, Dragline Equipment. Well maintained. Good condition.

Ruston-Bucyrus 10RB, Serial 5064. Recently overhauled. Very good condition.

15B Bucyrus-Erie EXCAVATOR. Good condition. Well maintained.

15B SHOVEL EQUIPMENT.

Offers invited.

DARBY'S PLANT HIRE CO., LTD., The Brook, Sutton, Ely, Cambs.

FOR SALE. Rotary Hoe TRENCHING MACHINES, by Howard. Both Super and Standard 1958 Models.

Ruston-Bucyrus EXCAVATORS, 10RB Models, 5000, 7000 and 20000 Series.

Various other items for Contractors' Plant.

WALKER AND PARTNERS, LTD., 23 Claremont Crescent, Sheffield 10. "Phone" 62428-9.

DOW-MAC (PLANT AND TRANSPORT), LTD., offer for HIRE Full Range of New Jules Welt TOWER CRANES and late type American 1201 LIMAS, fitted with special Crane Jibs, at attractive hire rates for long-term hires.—Dow-Mac (Plant and Transport), LTD., 18 Queen Street, Mayfair, W.1. Tel.: MAYfair 8511.

BUCKET SPECIALISTS. Special or Standard SHOVEL, TRENCHER, GRAB and DRAGLINE BUCKETS to suit all machines. Quick delivery—Write or phone the makers: NORTON'S PLANT HIRE, LTD., Billericay, Essex. Tel.: Ramsden Heath 365.

WANTED. large PUMP suitable for dry dock; to pump 50 tons per minute up to height of 30ft. if possible. Engine 250/300 b.h.p. Give type of pump, dimensions, r.p.m. and if direct-coupled unit or split. Urgent.—Write Box 2288, "The Contract Journal."

LIMA 1201, Serial No. L14530, Cummins Engine, L with Dragline, for immediate cheap SALE.

THOMAS McINERNEY AND SONS, LTD., Contractors, Runway 06/24, Shannon Airport, Limerick. Tel.: Shannon 225.

BULLDOZERS. MECHANICAL LOADING DOZERS and DRAGCATERVATORS, etc., TIPPING LORRIES, 17-ton, for HIRE.—HENRY FROUD, LTD., Primrose Wharf, Tunnel Avenue, Greenwich, S.E.10. Telephone: GREENwich 0072-3.

600

PORTABLE ASPHALT MIXER. by Barber-Greene, capacity 30 cu. yds. per hour, comprising 3ft. 8in. x 2ft. 8in. x 1ft. 6in. deep main-shaft, sheeted mild steel mixer with inclined 18in. wide trough belt feed conveyor in two sections extending to approx. 35ft. long. Driven by LeRoi 4-cyl. four-stroke x 4in. bore petrol engine, mounted on road chassis with heavy duty pneumatic tyres, with towbar, wheel fitted air brakes.

RUBBER-LINED MINING TYPE VACSEAL PUMP. by International Combustion, size 4in., with Suction lift, 10ft. head, capacity 150/400 g.p.m. for delivery head 80/100ft. and suction lift to 10/12ft., handling slurries containing maximum 70 per cent. solids. Arranged vee belt drive from 400/440/3/50 cycles motor with starter, mounted on combined bedplate. Three available.

FERLOY IRON MINING TYPE VACSEAL PUMP. by International Combustion, size 3in., with Suction lift, 10ft. head, capacity 150/400 g.p.m. for delivery head 80/100ft. and suction lift to 10/12ft., handling slurries containing maximum 70 per cent. solids. Arranged vee belt drive from 400/440/3/50 cycles motor with starting equipment.

SINGLE-DECK G.E.C. ROBINS GYREX SCREEN. by Fraser and Chalmers, 10ft. x 3ft. 6in., with 3in. wire mesh screen, arranged belt drive, speed 1,000 r.p.m. operating 20-deg. Inclination with feed and discharge chutes. Three available.

SINGLE-DECK VIBRATORY SCREEN. by Baxter, 8ft. x 4ft., driven by 6-h.p. totally enclosed motor with starting equipment.

TRough BELT CONVEYOR. by R. Sutcliffe, fitted 36in. wide rubber belt approx. 5in. thick, 400/3/50 cycles motor drive. Several available: centres from 127ft. to 58ft.

GEORGE COHEN

Sons & Company Limited

WOOD LANE, LONDON, W.12.

(Shepherd's Bush 2070)

And Stanhope, nr. Leeds. Tel.: Pudsey 2241.

MOS
CAMBRIDGE LTD.

146 HILLS ROAD, CAMBRIDGE. Phone: 87519

AIR COMPRESSORS FOR SALE. Two Bellis and Morcom 2,450 c.f.m., 100 p.s.i., 550-h.p. motor, Broomwade 500 c.f.m., EH251; 400 c.f.m., EH245; 300 c.f.m., EH240; 150 c.f.m., D22A; 110 c.f.m., EP60; also numerous others of all makes; and AIR RECEIVERS from 1ft. to 9ft. dia., 1,000lb. to 1,000lb. w.p.

FRED WATKINS (ENGINEERING), LTD., Coleford, Glos. "Phone: Coleford 2271/2."

THE UNUSUAL PLANT SERVICE. We claim to have the most comprehensive PLANT HIRE SERVICE in this country, and you can obtain from us almost everything the builder requires from a drain plough to an excavator. Our latest delivery in the London area every day. Note the telephone No.: Brentwood 2116.—SYMES (PLANT), LTD., Ongar Road, Brentwood, Essex.

DRY-RIGGED MOUNTED COLES CRANE HIRE. in the North-West. Jib lengths to 80ft. First-class operators, good service, keen rates.—WM. OLDHAM AND SONS, LTD., 44 Parliament Street, Dukinfield, near Manchester. "Phone: Ashton 1057/1342.

MITCHELL'S PLANT SERVICES, LTD. can always offer an excellent range of used WHEELBARROW Hydraulic or Chassisides MECHANICAL SHOVELS, etc., to suit all purposes.—Write or phone: Palmers Lane, Enfield, Middlesex. HOWARD 3493.

CONTRACTOR wishes to HIRE 19/22RB EXCAVATORS; also D7 and D9 TRACTORS. South Wales contract.—Written details of all machines available to Box 2346, "The Contract Journal."

RECONDITIONED MIAG 6,000lb. capacity FORKLIFT TRUCK, 10ft. lift, brick handling fingers available if required, price £950.—ABELSON AND CO. (ENGINEERS), LTD., Sheldon, Birmingham. Tel.: Sheldon 2424.

FOR SALE. We have a few very good DRAGLINE BUCKETS for Lima or similar machines, 31/2yd., 21/2yd. and 2yd., complete with Dressings.

25 Castlereagh Street, London, W.1. "Phone" 2673/5.

MARINE PLANT TUGS, BARGES, PONTOONS and WORK BOATS for SALE or HIRE. Consult THOMAS MCINERNEY, 22 St. James Road, East Ham, London, E.6. Tel.: GRA. 6697/3151.

FOR SALE. FACE SHOVEL EQUIPMENT for 22RB. £450 or offers. DOUGLAS SPECK, Contractor, 101 Ewenny Road, Bridgend.

40-TON DERRICK FOR SALE

Schmidt-Tychsen All-Electric 40-ton Stiff-legged DERRICK, complete with Dumb Boggies. 220 degrees slewing.

131ft. jib, 40 tons at 110ft.

146ft. jib, 30 tons at 120ft.

161ft. jib, 20 tons at 120ft.

Purchased new 1958. Available in about two weeks' time for SALE or HIRE.

DEW - CONTRACTORS - OLDHAM

MAIN 5631

DUMPERS

Two late 1958 THWAITES TUSKER 1½-yd. 4-wheeled Diesel DUMPERS, capacities 22 cu. ft. wet concrete. Completely reconditioned and guaranteed for three months, resprayed. £325 ex works.

Selection of THWAITES 3-wheeled Hydraulic TIPPING DUMPERS, capacities 12 cu. ft., in working condition, overhauled but not reconditioned, from £75.

One B.H.C. ANT QUEEN MOBILE HOIST, latest safety gear, completely reconditioned, £290 delivered.

One WINGET 14/10 MIXER, 10HTH, late 1957, all Hydraulic, with Weighbatcher, new control box. Completely reconditioned and resprayed, £750 ex works.

NEALE-WRIGHT

& COMPANY LTD.,

COVENTRY ROAD, CUBBINGTON,

LEAMINGTON SPA.

Telephone: Leamington Spa 924 and 925. London Gladstone 8574.

Modern Diesel

COMPRESSORS

EXCAVATORS

TRENCHERS

BULLDOZERS

Modern Diesel

ROLLERS

DUMPERS

MIXERS

PUMPS, ETC.

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

ELLIOTT BROS. (WORTLEY), LTD.
EXCAVATORS
Smith 4/14, Crane Rigged, £320.
Smith 2/10, any equipment, £490.
Smith 2/10, Skimmer/Backacter, £450.
Smith 2/10 Skimmer/Backacter, lying London, £450.
Ruston 1600 FACE SHOVEL, Gardner Engine, electric
start, £700.
Priestman Wolf Skimmer or Dragline, Dorman Engine,
electric start, £690.
All above in full working order and subject to
any test at the works.

EQUIPMENTS AND SPARES:

3/4yd. General Face SHOVEL, with Jib, chain crowd, £150.
3/4yd. Marion FACE SHOVEL, with Jib, rope crowd, £150.
1/2yd. N.C.H. DRAGLINE JIBS, £80.
1/2yd. N.C.H. DRAGLINE JIB EXTENSIONS, £20.
3/4yd. Smith 2/10 DRAGLINE JIBS, £90.
3/4yd. Smith 2/10 GRAB, £75.
1/2yd. N.C.H. BACKACTER, including Jib. Adaptable
to many machines, £130.
1/2yd. N.C.H. SKIMMER. Adaptable to many
machines, £50.
1/2yd. N.C.H. GRAB, 2-rope, £90.
1/2yd. N.C.H. CROWD SHOVELS, £130.
Smith 2/10 Universal JIB, £90.
Smith 2/10 FACE SHOVEL BUCKET and Arm, £80.
Smith 2/10 BACKACTER BUCKET and Arm, £60.
Smith 2/10 BACKACTER and SKIMMER, £75.
Smith 2/10 Face Shovel, £90.
Smith 2/10 Fowler RADIATOR, new, with new cowls, £40.
Caterpillar D6 RADIATOR, new, with new cowls, £40.
TRAILERS:
New 20-ton LOW-LOAD TRAILER, air brakes, 20ft.
well, £775.
12-ton 4-wheel LOW-LOAD TRAILER, £190.
PUMPS:
Ransomes and Rapier 3in. Centrifugal, Suction Hose
and Strainer, air-cooled Petter Diesel, £85.
Sykes 3in. Diaphragm, £40.
Sykes 3in. Centrifugal, 40ft. Suction Hose in 10ft
lengths, Petrol, £80.
3in. FIRE HOSE, excellent condition, 18 ft per foot.
ROLLERS:
8/10-ton Marshall TSF, Perkins Diesel, £1100.
ENGINES:
Fowler 8-h.p. 2-cyl. Petrol, power pack, new, £30.
Glen Works Diesel, new, Sheffield.
(Tel.: STOCKbridge 3276.)
Deepcar is six miles west of Sheffield, on A616
(Woodhead Road).

FOR SALE, Two 955 Caterpillar TRAXCAVATORS,
one side-tip, both with Cabs, £8,500 the pair ex
depot. Closed for annual holidays July 22 to
August 6, inclusive.—**JAW BONE WORKS**, Wood
Lane, Rothwell Haigh, Leeds. Tel.: Rothwell 3258.

WANTED, Onions 4 cu. yd. SCRAPER and
WINCH. Must be in good condition.—Replies
to **FIR BUILDING CO., LTD.**, 132 Bell Street,
Oldham, Lancs. Tel.: MAIN 3531 or 6505.

FOR SALE, PRIESTMAN WOLF IIIB, No. A7274,
Skimmer and Drag Shovel. — **HENRY BOOT**
AND SONS (PLANT), LTD., Callywhite Lane,
Dronfield, Sheffield. Dronfield 3206.

FOR SALE, New 3in. Mud Marvel Single and Twin
Diaphragm PUMPS; immediate delivery ex stock.
WILLIAM G. SEARCH, LTD., Whitehall Road,
Leeds, 12. Tel. 639081 (10 lines).

FOR SALE, BTD6, complete with Hydraulic Scraper,
in good working condition. May be seen in
Northern Ireland.
Write Box P.2380, "The Contract Journal."

PLANT HIRE: Earthmoving, Site Clearance,
Excavations for Roads, etc.
DOUGLAS HAMILTON, LTD.,
Tunbridge Wells. Telephone: Southborough 1538.

FOR SALE.
Two Lima EXCAVATORS, Model 34E, both
rigged as cranes. Face Shovel, Backacter and
Skimmer suitable for above machines.
One Lorain Model 78, rigged as crane.
Two Caterpillar No. 12 GRADERS.
Lima 1201 FACE SHOVEL and DRAGLINE.
Several Euclid Rear Dump TRUCKS, 9 cu. yd., fitted
with G.M.C. Engines.
Caterpillar Model 1100, 11000 Series, Birtley
Hydraulic Dozer Cat, Winch and L.P. Scraper.
One Priestman Wolf, fitted Face Shovel, Skimmer and
Backacter. Done six months' work only.
One Caterpillar D4 Model 2T, with Birtley Hydraulic
Dozer. Several other D4s and BTD6, fitted with
Hydraulic Angledozer.

EARTHSTRIP, Wakefield Road, Hampole,
Near Doncaster. Tel.: Adwick-le-Street 3166.

WANTED.
CRAWLER TRACTORS and Bulldozers, any
condition. Also Parcels of Spares for same. Prompt
SPARES PARTS available for TD6, 9, 14, 18, Caterpillar
D2, D4. D4 Model 2T, with Birtley Hydraulic
Dozer. Several other D4s and BTD6, fitted with
Hydraulic Angledozer.

Tel.: Stoke Saint Milbre 237. Nr. Ludlow, Shropshire.

WANTED, **WANTED**, **WANTED**, **WANTED**,
HEAVY EARTHMOVING MACHINES and EQUIPMENT
of all types. Modern machines preferred, others
considered. Immediate inspection: spot cash settlement.
Write, giving full details and location, to A.R.C.
MOTOR CO., LTD., Redhill Works, Arnold, Nottingham.
Telephone: Nottingham 263331/5.

FOR SALE, 14/10 Rex Cleaning Model Closed
Drum CONCRETE MIXER, on four steel wheels,
fitted with Petter Diesel Engine and Built-in Weigher,
overhauling gear, in excellent order. Delivery available.
W. V. DAVIES, Concrete Mixer Service,
Shipton-on-Stour. Phone 125.

FOR SALE, BTD6 Drott SKID-SHOVELS, from
May 1958. Choice of machines from £1,600.
All well maintained and all out working. Inspection
by appointment. Delivery free anywhere in the
country.—**MANTHORP**, South Molton, Devon. Tel.
270.

OVERLOADER, Weatherill Hydraulic, 1957, 4HTW,
fitted with heavy duty water ballast, 1400 x 24
rear wheel and tyre equipment, first-class order,
£1,350. — **GENERAL ROADWORK**, LTD., Mitcham
Road, Croydon. Tel.: Thornton Heath 6989.

FOR HIRE.—Available Immediately 1201
LIMA, fitted with genuine American 100ft. Crane
Boom, Back Hoe, Grader, Scraper, and in excellent
order. **PLANT SALES LTD.**, 25 Castleragh
Street, London, W.1. Telephone: Paddington 2663/5.

FOR SALE, BULL/ANGLEDOZER, Fiat 55L, 1953,
good condition, good tracks, ready for work,
etc.—**T. SULLIVAN PLANT HIRE**, Greenford Road,
Southall, Middx. Tel.: Southall 4481.

FOR SALE or **HIRE**. Immediate delivery, Ford and
Bedford "A" Frame WINCH TRUCKS. — **APPLY
PURCHASES LTD.**, 27 Regent Street, London, S.W.1.
Tel.: REGENT 3366.

A VAILABLE FOR HIRE AND CONTRACT: D9 and D8
TRACTORS with Blade or Scraper.—**ELLIOTT**,
Wetherby Road, York. Telephone: 78220 and 78501.
WANTED, BRICK CLEANING MACHINE.—Please
send details to J. J. GALLAGHER, LTD., Lea
Road, Sparkhill, Birmingham, 11.

PLANT BARGAINS—EX STOCK.
Allen-Michigan T6 CRANE, 30ft. Jib,
Skimmer, Trencher, Grab, G.M. Diesel, £3,250.
DINUM 100ft. Jib Power Shovel, Cab, two
Buckets, 1958, £1,650.

J.C.B. TRENCHER, on Fordson Diesel, Cab, two
Buckets, 1956, £650.

DINKIN DIGGER, on Fordson Diesel, with Skyline
Hydraulic Shovel, £595.

C.P.T. Trailer mounted Single-tool Diesel AIR COMPRESSOR, £265.

Broadside SVD1, on four wheels, Lister Diesel,
£295.

Bray BL430 Four-wheel-drive SHOVEL, 1957, first
class, £1,850.

Chasidis 500 Loadmaster HYDRAULIC SHOVEL, 1957,
£750.

Chasidis 1/2yd. Hi-lift Wire Rope SHOVELS. From
£100.

Coles 2½-ton Fully Slewing Diesel or Electric CRANE,
£950.

Rapier 6-ton Petrol/Electric CRANE on solid
rubbers, £850.

Morris 2½-ton Petrol/Electric CRANES. From £350.

Holmes 1959 Tractor 2-ton COMPRESSOR, on 1954
Fordson Diesel Tractor, £650.

Wallis and Steevens 2½-ton Diesel ROLLER, Sprinklers,
£450.

Rapier 410 EXCAVATORS, Diesel, Skimmer, Trencher,
Pliers, etc. £650.

Priestman 1/2yd. Face Shovel. From £950.

Priestman 1/2yd. Diesel, Skimmer and Trencher, 18in.
tracks, £650.

Springfield Buffalo 3½-ton Diesel ROLLER, Hired
repair, £150.

Aveling-Barford 4-ton ROLLER, ex Ministry, petrol,
£475.

A.C.E. Comet 10cwt. Diesel Mobile HOIST, tested,
£225.

Saga Junior and A.C.E. Midget SCAFFOLD CRANES,
£65.

Smith 2/10 EXCAVATOR, Face Shovel, Diesel, 7/8-ton,
7/8-ton LOW-LIFTING TRAILER, vacuum brakes,
1,200-gallon TANK-ex vehicle, £45.

Pegson 4in. Contractors' PUMPS. 36,000 g.p.h.,
crated, ex Ministry and unused, Morris engine,
gift, £125.

10/7 Stothert and Pitt Diesel Closed Drum MIXERS,
Two-wheel trailer, £185.

5/3½ Benford Petrol MIXER, four steel wheels, £50,
2½cwt. Benford Mk. 7 Diesel DUMPERS, Lister
Engines, £285.

15cwt. Benford Mk. 3 Diesel DUMPER, very good,
£195.

14/10 Rex Closed Drum Diesel MIXER, £300,
Hire Purchase. Spares. Service.

WILLIAM R. SELWOOD, LTD.,
Chandler's Ford, Hants. Phone 2981.

CRANES FOR SALE.

Fully Slewing Mobile Diesel Cranes:

Jones Super 40 3-ton, £1,250.

Jones Super 20 2-ton, £750.

Crane M.A. 3-ton, £825.

These Cranes are meant to any trial or examination.

Cleveland Tomor FORKLIFT TRUCK, £450.

THOMAS, South Street, Wells, Som. Tel. 3193.

CRANE HIRE SPECIALISTS.

Lower Bristol Road, Bath.

Consult G. W. SPARROW AND SONS, LTD.,
with all your lifting problems.

Lifts up to 50 tons; Jib Extensions to 170ft.

COUNTRY WIDE SERVICE.

Phone: Bath 78158-78450.

WELDING PLANT FOR HIRE. Diesel-driven Welding
Plants, single and twin. Any part of
country. Operators if necessary.—**UNDER WATER
WELDERS AND REPAIRERS, LTD.**, Roath Basin,
Cardiff.

FOR LIMAS

PLANT SALES LTD.,
25 CASTLEREAGH STREET, LONDON, W.1
Telephone: PADDINGTON 2663-4

KINGSTON PLANT
HANWORTH · MIDDX.
FOR 10 R.B. EXCAVATORS AND
ALL PLANT HIRE
FELTHAM 4084

FOR HIRE
ALL BUILDERS' PLANT

Alloy and Steel Scaffold tube,
boards, fittings, Acrow props,
concrete mixers, etc.

Prompt delivery, competitive prices and
terms arranged

M. SANDERS LTD.
18/20 Medlar St., London, S.E.5. ROD 5143

FOR SALE

HT4 TRAXCAVATOR, first-class order, fitted cab	£2,000
D4 71 L.P.C. DOZER EQUIPMENT, fitted with P.C.U., Winch	£850
L.P.C. DOZER EQUIPMENT	£300
4½-ton ROAD ROLLER, Aveling-Barford, Diesel	£400
2-ton Coles MOBILE CRANE	£800

Priestman EXCAVATOR, with Backacter, Face
Shovel and Skimmer, fitted with Diesel
£800

PLANT HIRE & SALES LTD.
MILLBROOK POINT ROAD,
SOUTHAMPTON

CRANE HIRE

Low-Loading Vehicles to 45-ton capacity

FREDERICK ATTWOOD LTD.

257-273 WOOD STREET
WALTHAMSTOW
LONDON, E.17

COPpermill 1151 (4 lines)

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR SALE. Caterpillar D7 3T. 10000 Series, TRACTOR, with Caterpillar 25 C.C.U., and Caterpillar Cable Angledozer, £2,500. Caterpillar D8 12T. 7000 Series, with Caterpillar 25 C.C.U., £2,200. Caterpillar D8 2U. 4000 Series, with Caterpillar 25 C.C.U., £1,500. Caterpillar D4 7T Series, with La Plant Choate Angledozer, £650. Caterpillar D2 4T Series, with La Plant Choate Angledozer, £550. Le Tournneau 12yd. LP SCRAPER, £500. Le Tournneau 15yd. FP SCRAPER, £550. Caterpillar 25 CABLE CONTROL UNIT, £450. A. J. TYLER AND CO., 13 Headstone Lane, North Harrow, Middlesex. Telephone: Underhill 1515.

D², D8, TD18 and TD14 BULLDOZERS and Scrapers, Motor Graders, Excavators and new Tippers for HIRE or SUB-CONTRACT WORK. Particular attention given to finish and compaction. New and modern machines in first-class condition. Good operators. Technical staff available to analyse, programme and price complex projects.

DICK HAMPTON,

Broadview Farm, Blacknest, Alton, Hants. Telephone: Bentley 2241.

AVAILABLE FOR HIRE: EXCAVATORS, BULLDOZERS, DUMPERS, MIXERS, Coles CRANES, etc. All classes of LORRIES, including Low-loaders. AMEY'S AGGREGATES, LTD.,

TRAXCAVATORS for HIRE. Caterpillar 977, 955, HT4, International BTD6, 4-in-1. All in first-class condition, with experienced operators. MOBILE HAULAGE, LTD., 250 Tottenham Court Road, London, W.1. Tel.: Langham 7833/5.

FOR SALE. 2-ton Jones Super 22 Mobile CRANE. Ruston Diesel engine, pneumatics, splendid condition.—WILLIAM G. SEARS LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

RUSTON 110RT DRAGLINE for SALE, 100ft. Jib, 51/2yd. bucket, 12 r.p.h. Petrol Diesel, new 1958, in very good order, £42,000.—ALAN R. Davies, 20 Whiteladies Road, Bristol. Tel. 38418.

ROAD ROLLERS WANTED. by Aveling-Barford or Marshall. All sizes, 2-ton to 8-ton; post-war preference.—A. M. COLE, Eastgate, Steaford, Lincs. Tel. 463.

DUMPERS, Drayton, 1yd., year 1959, in very good condition, £385 each.—GENERAL ROADWORK, LTD., Mitcham Road, Croydon. Tel.: Thornton Heath 6989.

FOR SALE. PRIESTMAN WOLF, rigged for Clamshell. — PLANT SALES, LTD., 25 Castlereagh Street, London, W.1. Tel.: Paddington 2663/5.

EQUIPMENT SALES & HIRE CO. LTD.

FOR HIRE

TRAXCAVATORS 955

CAT. D.7's Dozer or Scraper
19 R.B.'s—Any Equipment

HOUNSLAW 8831

Hire it from
ABELSON

Phone: SHEldon 2424

DRAGON
PLANT HIRE LTD.

Excavators, Bulldozers, Overloaders, Crawler-Cranes, Trenchers, Dumpers, Mixers, Pumps, Drott Shovels, Road Rollers, Scrapers, 10-ton Articulated Loader, etc.

FOR HIRE EVERYWHERE
RING GUILDFORD 67277

FOR SALE. Three trailer-mounted C.P.T. Portable COMPRESSORS, 105 cu. ft., Ruston Diesels, £150. One C.P.T. COMPRESSOR, 210 cu. ft., Caterpillar D7 Engine, £450. One Neals 2-ton NM MOBILE CRANE, pneumatics, £650. One Jones 3-ton Super 40 MOBILE CRANE, pneumatics, £800. One New 1-ton MOBILE CRANE, solid rubber tyres, £150. One Aveling-Barford 5-ton Diesel ROLLER, Ruston Diesel, £175. Two D6 Caterpillar STARTING ENGINES, £100 each. One D6 100 h.p. type DIESEL ENGINE, £350. Quantity of NCK304 Excavator Spare Parts.

A. J. TYLER AND CO., 13 Headstone Lane, North Harrow, Middlesex. Telephone: Underhill 1515.

CONTRACTORS' PLANT FOR HIRE. New Motorised PAYSCRAPERS for immediate HIRE (22 cu. yd.). BTD6, TD1 and TD18 TRACTORS, fitted with Drott Skid Shovels. BTD20, TD9, TD14, TD18 and TD24 TRACTORS, with Bulldozers and/or Scrapers. TD18 TRACTORS with Pipe-laying Equipment. 10RB, 19RB and 22RB EXCAVATORS, with all Equipment. First-class machines and operators, backed by finest field service in Great Britain. Generous transport terms to all parts of England.

LUMLEY (PLANT), LTD., Stratford-on-Avon, 4242, Ashford (Middx) 4191, Cardiff 33572.

FOR SALE. CONCRETE MIXERS 10/7, 14/10, Stothert and Pitt, Petter, A.C. Diesels, from £50 each. Bailey BRIDGE CONTAINERS, £16 each. BACKFITTER EQUIPMENTS, £12 Smith, H. WARD AND SONS, LTD., Marshalls Works, Bradford, S. Telephone 72727.

PLANT for SALE, Two GF DUMPERS and One Benford DUMPER, Reconditioned and in working order, at £95 each.

PLANT HIRE (SERVICE), LONDON, LTD., Chaffield Works, 1 Chaffield Road, Battersea, London, S.W.11. Telephone: BATterssea 9218.

FOR COMPRESSOR HIRE SERVICE—From 1-tool to 12-tool (70 c.f.m. to 625 c.f.m. f.a.d.), Lorry-mounted, and Portable. Full range of Pneumatic Tools.—HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 23161 (5 lines).

WANTED to PURCHASE 2½/3yd. Diesel DRAGLINE/CRANE. Machine required for very occasional use, and old machine not objected to. Must be low price.—M.R.S., LTD., Island Works, Copperlins Lane, Amersham 2138.

SLOGGETTS PLANT HIRE

COMPRESSORS OF ALL TYPES

2 Burtons Road, Hampton Hill, Middx.

Telephone: Teddington Lock 1138/9

Diaphragm Pumps
SALE or HIRE
All types and capacities available

DUKE & OCKENDEN LTD.

28 Victoria Street, London, S.W.1. ABBey 6338
Works: Littlehampton. Phone: SIX

Pointing the way...
TO CONSTANT ACCURACY IN
PROPORTIONING AND
LOWEST CONCRETE
PRODUCTION COSTS

A complete range . . . 3½T, 5T, 7T,
7S, 10S, 12S and 14S, with choice
of steel wheels or pneumatics. Folding
Hydraulic Weigher and Drag
Loader Shovel available for 7S, 10S,
12S and 14S models. Illustrated
literature and prices on request.

BLAW KNOX LIMITED

Box No. 146 90/94 Brompton Road, London S.W.3. Telephone: KENSington 5151



BK 579

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR SALE.
New 12in. SWIVEL BEND complete, by Gwynnes, for gravel pumping. Cost £130, accept £70.
New BRICK AND BLOCK MAKING MACHINE, by Liner. Cost £104, accept £60.
Ex W.D. Autocar SPARES, and not used since purchase from W.D., Two Full Gearboxes, Transfer Box, Front and One Rear Axle, both Timken and with double reduction and air brakes. Eight Wheels and Tyres, 900 x 20 for same. Offers for the lot or any part to clear.
Four 1400 x 20 ex W.D. TYRES, some on Foden wheels, £25 each to clear.
Electric WELDER TRIANGLE, 230-Volt and 150-Amp, complete, £30.

THE BODENHAM SAND AND GRAVEL CO., LTD., Bodenham, Hereford. Telephone: Bodenham 236.

WANTED. FORK LIFT TRUCKS, 1-ton to 6-ton capacity, Petrol or Diesel, any condition. Can be on Instruction. We offer good prices in PART EXCHANGE and HIRE FORK LIFTS for all purposes.—FRED WATKINS (ENGINEERING), LTD., Coleford, Glos. Telephone: Coleford 2271/5.

RAILS, RAILWAY LINE ATTACHMENTS, RAILWAY SLEEPERS of all grades and CROSSING TIMBERS from 8ft. 6in. to 20ft. long for SALE. Deliveries ex stock. State use required for.—F. HIRD AND SONS, Armthorpe, Doncaster. Telephone: Armthorpe 339.

ONE LIMA 1201 FORWARD SHOVEL EQUIPMENT, the bucket of which has never been used, is available for SALE. PLANT SALES LTD., 25 Castlereagh Street, London, W.1. PAD. 2663/5.

NEW Greens 8cwt. Vibratory ROLLERS. Ex stock delivery SALE or HIRE. Hire purchase available.—WILLIAM R. SELWOOD, LTD., Chandler's Ford 2981 and Exeter 72375.

FOR SALE, new 8cwt. Greens VIBRATORY ROLLERS. Immediate delivery — DIAL-MEC, LTD., 47 Castle Street, Hertford. Tel.: Hertford 2456.

600

SPENCER-HOPWOOD VERTICAL MULTITUBULAR BOILERS READY FOR PROMPT DISPATCH.

Quantity	Size	Dimensions	Evaporation
Three	20	11' 6" x 5' 3"	2,000/2,700
Two	16	10' 9" x 4' 9"	1,550/2,060
Four	14	10' 3" x 4' 6"	1,320/1,760

All 120 p.s.i. with fittings and mountings. Suitable solid or oil-firing; ideal for piling or normal industrial duties.

GEORGE COHEN

Sons & Company Limited

WOOD LANE, LONDON, W.12.

Telephone: Shepherds Bush 2070.

And Stanningley, nr. Leeds. Tel.: Pudsey 2241.

PUMPING SLUDGE?
you need a
MUD MARVEL'

BUY
or
HIRE
from the
sole makers
W.G.
SEARCH WHITEHALL RD.
LTD. LEEDS. 12.

FOR SALE.
1956 DINKUM DIGGER, on Fordson Major Diesel Tractor, with Skid Shovel, ready for work. £600.
1955 DINKUM DIGGER, on Fordson Major Diesel Tractor, with Hydraulic Dozer Blade, reconditioned. £500.
Priestman Wolf EXCAVATOR, Serial A3913, with Dragline Equipment, ready for work. £650.
Priestman Wolf EXCAVATOR, 1953, Skinner/Backacter, wide tracks. Choice of two. £1,050 each.
David Brown Crawler TRACTOR, with Blaw Knox Hydraulic Dozer, 1955. Type 301TD, almost as new. £550.
10RB EXCAVATOR, 10000 Series, Skinner/Backacter and Crane. Choice of two fine machines. £750 each.
FIELDS, Forest Edge, Ringwood Road, Ferndown, Dorset. Phone: Ferndown 837.

FOR HIRE OR SALE: 5,000yd. Jubilee TRACK, 25lb. Rails; 20 TURNTOWNS; 200 FLAT BOGIES; 20 SIDE-DUMP WAGONS, 54 cu. ft.; 20 VAN TRAMS; all 24in. gauge; 50 Pairs WHEELS/AXLES, 36in. gauge; 1,500 STEEL CROWBARS, 36/42in., 1½/1¼in.; 400 Octagonal STEEL JUMPER DRILLS, 4ft. 6in. x 11½in. across flats.—JAMES H. WILLIAMS, 4 Dock Chambers, Cardiff. Tel. 3175.

FOR SALE, new and used Bristol Diesel CRAWLER TRACTORS, with Angledozer, Loading Shovels and Trench Diggers.—Demonstrations without obligation from the Main Dealer, H. A. SAUNDERS, LTD., 14-20 The Butts, Worcester. Telephone 6651.

WANTED. 10 x 6 or 14 x 7 Modern Self-driven STONE CRUSHER. Parker Monarch or similar. NORMAN WALKER (MACHINERY), LTD., Anlaby, Hull.

WANTED. One BITUMEN HEATING TANK, 8,000-10,000-gallon capacity; secondhand Cartem or similar; oil-fired. — Write Box P.2390, "The Contract Journal."

BUNKER CLAMSHELL GATES LEVER OR AIR OPERATED ALL STEEL CONSTRUCTION



MAXIM CONVEYORS
(ENGLAND) LTD.
BELVEDERE • KENT
Ring ERITH 4223

AXWORTHY OFFER FOR SALE

Smith 2/0 EXCAVATOR. Skinner/Backacter (London) £395.
10RB EXCAVATOR, 20000, 22000 and 23000 Series, Dragline (Midlands), £2,750-£2,850 each.
10RB EXCAVATOR, 20900 Series, F/S, Dragline and Backacter (Midlands).
19RB EXCAVATOR, 11000 Series, rigged as 50ft. Crane (S. Wales), £2,400.
22RB EXCAVATOR, 20000 Series, F/S or Dragline (Midlands), £4,100.
Smith 21 EXCAVATOR, four equipments (N. East), £2,500.
N.C.K. 304 EXCAVATOR, new 1948, Dragline or Crane (W. Country), £2,250.
N.C.K. 304 EXCAVATOR, new 1953, F/S (London), £3,150.
37RB EXCAVATOR, 7500 Series, Dragline (Midlands), £4,950.
Smith Super 25 5-ton MOBILE CRANE, 18ft. Jib, new 1946, Perkins Diesel (Midlands), £950.
Coles 12½-ton MOBILE CRANE, 80ft. Jib, new 1949 (Yorkshire), £5,000.
Butters 7-ton Electric 1-motor DERRICK CRANE, 120ft. Jib (Lancs.), £2,150.
Morgan 10-ton Electric DERRICK CRANE, 120ft. Jib (Midlands), £3,000.
Anderson-Gill 10-ton Steam DERRICK CRANE, 120ft. Jib (Midlands), £3,000.
SCRAPERS, various, 9yd., 12yd., 13yd., 14yd. and 18yd. (Midlands and N. East).
Weatherill and Chaseside LOADING SHOVELS, various (London), £1,000.
Pegson 10 x PORTABLE CRUSHING AND SCREENING PLANTS, Ruston Diesels, unused (London).
Drott 4-in-1 SKID SHOVELS, new 1957 and 1958 (Berkshire), £2,200-£2,350.
Blaw Knox Junior WEIGHBATCHER, first-class (London), £110.

SPECIAL BARGAIN:

19RB DRAGLINE EQUIPMENT (London), £275. Ring Windsor 60668.

AXWORTHY AND COMPANY, LTD., 4 Ouseley Road, Old Windsor, Berks.

LIGHT RAILWAY MATERIAL FOR SALE
500yd. of new 30lb. B.S.M. RAIL.
1,000yd. of new 20lb. B.S.M. RAIL.

New Lister Diesel LOCO., from £434.

Eight Diesel LOCOMOTIVES, from Motor Rail, Ltd.

Two Montana Diesel LOCO., 2½ tons, 24in. gauge.

One Simplex Diesel LOCO., with National Engine.

One 1½-ton Lister Petrol LOCO., completely overhauled.

One 1½-ton Diesel LOCO., with J.A.P. Engine, completely overhauled.

14 U-shaped TIPPING WAGONS, 24in. gauge.

20 cu. ft. capacity.

Four 2 cu. yd. 24in. gauge Rupper TIPPING WAGONS.

Macq Pressed Steel Lay-on SWIVEL TIPS.

Two 10-ton SWIVEL TIPS.

POINTS and CROSSINGS and TURNTABLES.

WHEELS and AXLES, all gauges.

Macq AXLEBOXES.

PLATELAYERS BOGIES, 4ft. 8½in. gauge.

M. E. ENGINEERING LTD., 457 Finchley Road, London, N.W.3. Telephone: Mengilim, London. "Phone: HAMpost 7481-23.

STEEL SHEET PILES and TRENCH SHEETS urgently wanted. All sections bought; large and small quantities. Immediate payment.

DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. Victoria 022.

FOR SALE, Two D7 TRACTORS. One TM Series and one AT Series with Dozer, and one Other 9yd. Scraper. Both machines in first-class condition. Can be seen working.—HIGHWAY CONTRACTORS, LTD., Ilkeston, Derbyshire. Tel.: Ilkeston 4376/7.

WANTED, 32RB. HEYS (BRITANNIA), LTD., 27 Tonge End, Whitworth, Rochdale, Lancs.

FOR SALE, Jones KL22 MOBILE CRANE, in very good condition, complete with Grab. — THE CRADMIN CO., 26 Roseberry Road, Bath. Tel. 78543.

VITAL STATISTICS

Of the new DETON STEAM CLEANER will be supplied ready to run. Within minutes from cold 900lb. cleaning steam per hour, or 220 Imperial gallons very hot water per hour. NOW FOR SALE. Det-On is already famous the world over for its unique ability to remove difficult industrial dirt and grease, quickly and easily. Consult us on how the Det-On can solve your cleaning problems, particularly the unusual.

Telephone or write:
WANSON COMPANY, LTD., 7 Elstree Way, Borehamwood, Herts. Tel.: ELStree 5696.

PLANT HIRE SUGGESTIONS

CONCRETE BREAKING: H Type Kangaroo Hammers, universal 210/230-V, ideal 12in. concrete, silent, trouble-free, £6 10s. week.

COMPRESSORS: 1½ hour, including operator. Warcop Road Breakers (the self-contained concrete breaker), £4 5s. week.

FLOOR Sanders: Nu-Floor, 8in., £5 week.

RAMMERS: Warcop, £5 week.

TARPAULINS: 18ft. x 12ft., 6/- week; 18ft. x 15ft., 7½ week.

CONCRETE MIXERS: 3½ Petrol, £1 10s. week. Also complete range SITE HVS: 4½d. ft. super. week.

WARSOX PUMPS: 2in., 6,000 gallons per hour, £4 5s. week.

RAILWAY SLEEPERS: 5ft. 6in. x 10in. x 3in., 10s. week.

ALSO COMPLETE RANGE OF MECHANICAL AND NON-MECHANICAL PLANT.

CAMPBELL-GRAY LTD.

68/70 Pengo Rd., South Norwood, London, S.E.33

Telephone: SYD. 3131 (3 lines)

FOR RELIABLE SERVICE . . . RING



BIRMINGHAM
YARDLEY WOOD RD., MOSELEY
TEL. BIRMINGHAM "SOUTH" 3811-3

LEEDS
BRADFORD ROAD, TINGLEY
TEL. MORLEY 4053

LEICESTER
MELTON ROAD, THURMASTON
TEL. SYSTON 3357-8

ST. HELENS
HAYDOCK LANE, HAYDOCK
TEL. ASHTON-IN-MAKERFIELD 7284

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

NEAGRON (CONSTRUCTION) LTD.

OFFER FOR SALE:

ENIIT 60-ton capacity BULK CEMENT PLANT: 6-ton Cement Receiving Hopper, 60-ton Silo, elevators electrical driven.
BROOMWADE 2-ton COMPRESSORS, Lister Model 24/30 Diesel Engines, solid rubber tyres, 1951.
C.P.T. 500 cu. ft. Portable COMPRESSOR, Ruston 120-h.p. VPH Diesel Engine, four pneumatic tyres.
C.P.T. Type P08 Portable 500 c.f.m. COMPRESSOR, Ruston GVP Diesel Engine, four pneumatic wheels, new 1952.
NEALS Model NM 2-ton capacity Mobile CRANES, 20/25ft. x 30/40ft. Lattice Jibs, Ruston 2VTH Diesel Engines, pneumatic tyres, complete with air-conditioning, £1925/50.
JONES KL44 3/4-ton Mobile CRANE, 40ft. Swan Neck Jib, Ruston 2VSH Diesel Engine (electric starting), heavy duty pneumatic tyres and restrictor rings, new 1951.
MORRIS Versatile 5-ton capacity Mobile CRANE, Perkins Diesel Engine, Diesel/Electric drive, solid rubber tyres.
NCK Model 304 3/4 cu. yd. capacity EXCAVATOR, rigged as crane, 60ft. Jib, Audible Warning Indicator, "B" ballast, boom stops, Thornycroft Diesel Engine, new 1948.
COLES 25-ton capacity Lorry-mounted CRANE, Model A.2710, 30ft. tubular strut Jib and extensions to 100ft., new 1958.
BUTTERS 7-ton capacity Electric Derrick CRANE, 90ft. Jib, Three Drum machine for grabbing duty, 96.82 cu. ft. capacity Single Rope Grabbing Machine, new 1955.
HENDSON 10-ton capacity Three Drum for grabbing duty Electric Derrick CRANE, 100ft. Jib, single motor machine, new 1951.
MORGAN 120ft. Jib, Safe Load Indicator, Three Drum machine for grabbing duty, fitted oil-ring equipment, new 1946.
MORGAN 15-ton capacity Steam Derrick CRANE, 120ft. Jib, new 1958.
SCHMIDT-TYCHSEN 40-ton capacity Electric Derrick CRANE, 161ft. Jib, 220 deg. slewing, new 1958.
LIEBHERR Model BA 1200 ton capacity Slewing Tower Crane, standard Jib and extension to 55ft., electrically operated, pneumatic tyres 11.00 x 20 14-ply with outriggers, or alternatively rail-mounted, new 1959.
BUILDMASTER BDK150 Tower CRANE, 59ft. Luffing Jib, new 1954.
BUILDMASTER 120ft. Electric Tower CRANE, 91ft. Maximum 85ft. 3in. Luffing Jib, now 1957.
NCK Model 304 3/4 cu. yd. EXCAVATOR, Face Shovel Equipment, A.E.C. 7.7 Diesel Engine, new 1955.
LIMA 1201 3/4 cu. yd. EXCAVATOR, 80ft. Dragline Equipment, 3/2 cu. yd. bucket and 21 cu. yd. Backhoe, Forward Shovel, 21 cu. yd. Cummins Power Pack Diesel Engine, new 1952.
ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4. Acid tank cleaned, oiled and offered in first-class condition.
PORTASILO 20-ton capacity CEMENT CONTAINER, 1955.
NEWAGE 25-kVA GENERATING SET, Perkins 44 Diesel Engine (electric starting), four pneumatic tyred trailer, new 1951.
MUIR-HILL 3 cu. yd. capacity DUMPER, Model 100D, Ford Diesel Engine, new 1950.
DINKIN DIGGER, 24in. Bucket Diving Blade and Loading Shovel mounted on Fordon Major tractor, new 1956.
TWO EUCLID Type 27FD 9.7 cu. yd. REAR DUMP TRUCKS, Cummins Diesel Engines.
SYKES 10ft. x 14ft. x 10ft. PILE FRAMES, 3-ton Drop hammer, Double Drum 7in. x 9in. Steam Winch Boiler, mounted on flanged castor wheels.
CONCRETE PUMPS, Model PC3 6in CONCRETE PUMPS, new 1955/57.
VIBRO VERKEN Type BV Diesel/Electric CONCRETE SPREADING MACHINE, tracks 9ft. 6in. x 11ft. 12in., 13in. 7in. Deutz Diesel Engine, new 1955.
INTERNATIONAL Drott BTDE Tractor SHOVEL, 1 cu. yd. capacity Bucket, new 1957.
CATERPILLAR DA TRACTOR, 2T Series, L.P.C. Hydraulic Dozer Equipment.
CATERPILLAR DS TRACTOR, 2U Series, Birtley Hydraulic Dozing Equipment, Model 8A Pump and Caterpillar Model No. 25 P.C.U.

FURTHER DETAILS:

Abbey House, Victoria Street, London, S.W.1.
 Telephone: ABBEY 5152 (4 lines).

FOR SALE.
 Caterpillar D4, Series 2T, fitted with L.P.C. Hydraulic Angledozer, £850.
 International 50-h.p. BTDS, Hydraulic Angledozer, £795.

Both machines in excellent order; ready for work.

Apply MOBILE HAULAGE LTD.,
 230 Tottenham Court Road, London, W.1.
 Phone: Langham 7833.

DESIGNER / DETAILERS**REINFORCED CONCRETE****THE MODULAR CONCRETE CO. LTD.**

have vacancies in their engineering department for Designer /Detailers on interesting reinforced concrete work, both in situ and precast. Previous experience with specialist firm in this field desirable, but not essential. Working conditions are first-class. Basic salary up to £1,100, according to experience. Profit-sharing bonus scheme after a probationary period. Superannuation scheme. Subsidised canteen. 5-day week. Positions are progressive and offer excellent experience to energetic men interested in developing up-to-date techniques of design and construction. Please apply in writing, stating age, training, experience, and present salary to:

Personnel Manager, 1258/60 London Road, Norbury, S.W.16

VALES PLANT REGISTER.

FOR IMMEDIATE SALE:

MISCELLANEOUS:

MUIR-HILL 10B 3 cu. yd. DUMPERS, Perkins Engines, 1952/53, good working order, £365 each.
MUIR-HILL 14B 4½ cu. yd. DUMPERS, Perkins Engines, 1951/52, very good order, £1,000 each.
LOW-LOADING TRAILERS 3-ton and 7½-ton, ex Ministry, 4x2, TRAILER-MOUNTED TANKS, 250, 500 and 750 gallons.
AIR PUMPS 2/3-ton COMPRESSORS, Lister Diesel Engine, on 2- or 4-wheel Trailer, or Lorries Chassis, ex Ministry, unused, from £440/£485 each.
AVELING-BARFORD 3-ton Diesel ROLLER, GN00867, Ruston Diesel, Sprinklers, good condition, £495.
AVELING-BARFORD 8-ton ROLLERS, Sprinklers and Cab, new 1954, £1,800.

GREENS 8-ton ROLLERS, new Ford Diesel, Sprinklers, Canopy, ex Ministry, £1,300 each.

PEGSON 16in. x 5in. PORTABLE CRUSHING AND SCREENING PLANT, Ruston Diesel, unused, as new, £750 each. Also 16in. x 5in. and 12in. x 7in.

HDG5 TRACTO-SHOVEL, G.M. Engine, 1955, £1,950.

933 TRACCAVATOR, 1955, 1½yd. Bucket, very good condition, £4,250.

BTDS EXCAVATORS and Dozers, new 1954/55, £550/£1,050 each.

INTERNATIONAL TD18A TRACTOR, with Dozer and Winch, good working order, £1,800.

INTERNATIONAL TD14A TRACTOR, with Dozer and Winch, completed overhauled, £1,600.

ALLIS CHALMERS HD7 TRACTOR, with Angledozer and Winch, rebuilt, £600.

CATERPILLAR DB 2U 12700 Series, Birtley Hydraulic Angledozer and 25 C.C.U., very good order, £3,550.

CATERPILLAR DB 2U 16000 Series, Birtley Hydraulic Angledozer and 25 C.C.U., very good order, £3,850.

WICKHAM Diesel 3in. Diaphragm PUMPS and HOSES, first-class order, £175 each.

20-ton FRODINGHAM 1B PILING, in 10/16ft. lengths. Once driven.

100 lengths LARSEN 2 and 3 PILING, in 20/30ft. lengths.

BAXTER 36in. x 24in. CRUSHER, no motor, with feeder, 1949, £2,750. (Northern Ireland.)

10-, 15-, 20-, 25-ton CEMENT SILOS, by Portasilo, Acrow and Blaw Knox.

CATERPILLAR DT 2U 7J TRACTORS, with Dozer Equipment, from £700 each.

CATERPILLAR D4 60 TRACTORS, with Dozer and Winch, £1,450.

BLAW KNOX MOBILE BATCHMASTERS, 21 cu. yd., 3-compartment, 1955, very good condition, £525 each.

B.S.P. 50/65t. PILE FRAMES, with 10ft. Lever extension, new October, 1953, three months' use, £1,750 each.

B.S.P. 7B S.A. HAMMERS, £565 each.

HADFIELD 30in. x 24in. Spiked CRUSHING ROLLS, practically new condition, £600 o.n.o.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE—SEND TO VALES FREE PLANT REGISTER.

Further details: 14 Lower Grosvenor Place, London, S.W.1. VICTORIA 7531, 3501, 8080, 9886 (15 lines).

FOR SALE. 1958 EXCAVATOR, Skimmer, Backacter, Dragline, Series 10700, £2,100.

33R5 EXCAVATOR, Dragline, Series 9800, £2,950.

20-ton Scammell LOW LOADER, Series 2017, Well, Carrimore Low-Loading Trailer, £1,050.

Two Carco E TIMBER WINCHES.

Three TOURNAKRANES, AD3, 20,000lb.

One CATERPILLAR 8H GRADER.

One HD14 BAKER ANGLED佐ZERS.

One HD14 ROAD GRUBBER EQUIPMENT.

TD14 Dozer CORNER SHOES.

Two Gar Wood CU2 WINCHES.

MERTON ENGINEERING CO., LTD., Faggs Road, Feltham, Middlesex. Tel: Feltham 3045.

FOR SALE. 18/12 Rex Closed Drum CONCRETE MIXER, on four steel wheels, fitted with Ruston Diesel Engine, overhauled, cleaned and painted ready for use. Weigher and Dragline available if required. W. V. DAVIES, Concrete Mixer Service, Shipston-on-Stour. Phone 1212.

FOR SALE. SL40 3-ton Jones MOBILE CRANE, 1947 model, in good working order. May be inspected by appointment during normal working hours. Apply: FERROU CONCRETE AND STONE (NORTH NOTTS.), LTD., Lound, near Retford, Nottinghamshire. Telephone: Ranskill 212.

FOR SALE. Two Super C Le Tourneau Diesel MOTOR SCRAPERS, fitted Cummins Diesel Engines. fit for service, with good tyres, £750 each. —HARFORD ENGINEERING CO., LTD., Whiting Road, Norwich.

WANTED. ALL TYPES OF CLETRAC TRACTORS, any condition.—C. J. THORNE AND CO., LTD., Uckfield, Sussex. Telephone 178 (3 lines).

NOBLE PLANT AND ENGINEERING CO.

75 Terrace Road, Walton-on-Thames, Surrey. Telephone: Walton-on-Thames 23693/4.

PLANT FOR SALE OR HIRE:

EXCAVATORS:

Ransomes Rapier 423 EXCAVATOR, 1953, choice of equipment. Very good order, £1,350.

10RB EXCAVATOR, 8-ton, 1950, Diesel, Ruston 3VRON Diesel, and equipment, £700.

10RB EXCAVATOR, No. 15157, completely overhauled, choice of equipment, £1,650.

19RB CROWN SHOVEL EQUIPMENT, new and unused, £525.

22RB CROWD SHOVEL EQUIPMENT, new and unused, £525.

Whitlock Dinkin DIGGER, 1954, Ford 4D. Good working order, £425.

27/21 Westwood Single Chain Ring Discharge GRAB, first-class order, £50.

27/21 Westwood Self-dumping GRAB, with teeth. Good order, £135.

Bucyrus-Erie 10/8 cu. ft. Heavy Duty Double Rope DIGGING GRAB, £130.

10RB DRAGLINE 1B, 28ft. channel. First-class order, £525.

All types of Ruston, Priestman, Smith and Ransomes and Rapier EQUIPMENTS for SALE, including Dragline Buckets, Jibs, etc. Details on application.

Aveling-Barford 30cwt. ROLLER, Model GA, 1949, 10-in. Ford Diesel Engine, £225.

Green 6½-ton ROLLER, Model W, year 1945, fitted Perkins P4, with cab, £650.

Marshall 8/10-ton ROAD ROLLER, year 1948, Perkins P4, with canopy, scarifier and spray, £975.

Caterpillar D6 TRACTOR, 8U Series, fitted Bray Hydraulic Angledozer. Clean machine. Details on application.

Caterpillar D4 TRACTOR, 2T Series, L.P.C. Angledozer. Repairs required, £475.

Chasefield 30cwt. DUMPER, 1958, Petter AVA2 Diesel. Excellent order, £250.

Benford 15cwt. DUMPER, generally overhauled and in good working order, £140.

Air Pumps COMPRESSOR, 167 c.f.m., 1959, mounted on four pneumatics, Ford 4D, £575.

Quantity of MONORAIL, good condition. Low price to clear.

Coles 5-ton MOBILE CRANE, on Thornycroft chassis, NR Diesel, good order, rope derrick, £2,300.

Lorain Model MC3 7½-ton Lorry-mounted MOBILE CRANE, Overhauled, £400.

SAW BENFORD, 12in. to 28in. Petrol and Electric, from £50.

Sykes PUMPS, 11-in., 2in., 3in., Centrifugal and Diaphragm, Petrol, £10/£30 each.

Allam ELECTRIC VIBRATORS, £30.

Benford 5½-ton Tilting Drum MIXERS, Petrol Diesel, 1955, £250.

Wing 10/10 Closed Drum Hopper-fed MIXER, year 1951, Petter Diesel, £125.

Millars 10/10 Closed Drum Hopper-fed CONCRETE MIXER, with Hydraulic Weigher, Ruston Diesel Engine, year 1954/55. Good order, £275.

Stotherton and Pitt 10/10 Closed Drum Hopper-fed MIXER, Lister Diesel, high discharge. Very good order, £285.

Rex 10/7, 14/10 and 18/12 Rotary Drum MIXERS, Ruston Diesel, from £130.

ACE Vibrator, 10cwt., £150.

LOW-LOADING TRAILER, designed for carrying Bristol Tractor, £250.

50cwt. Petrol ROLLER. Repairs required, £60.

LATE ITEMS.

Caterpillar HT4 TRACTOR, 26VEL, year 1955, very good working order, 7U Series. Reasonable price. Further details on request.

Further details from:

NOBLE PLANT AND ENGINEERING CO.

75 Terrace Road, Walton-on-Thames, Surrey.

Telephone: Walton-on-Thames 23693/4.

TOKEN FOR PLANT HIRE your EXCAVATORS, DOZERS and SCRAPPERS, Dinkin Major DIGGERS and Drott SHOVELS, TRENCHERS, DUMPERS, ROLLERS, CONCRETE MIXERS, PUMPS, COMPRESSORS, RAMMERS, VIBRATORS, HISTS, GENERATORS, etc., from **TOKEN CONSTRUCTION CO., LTD.**, Plant Depots, Station Rd., Thatcham, Berks. Tel: THA 3243-3370. Valmar Rd., Camberwell, S.E.5. Tel: BR100 5103.

FOR SALE: Four Caterpillar D7s, each fitted Hydraulic Dozer and Double Drum Winch; five Le Tourneau 9yd. SCRAPPERS, almost unused; also one Caterpillar D4 6U and four Caterpillar D4 2Ts, all new with Hydraulic Dozers. Lying Norwich. Inspection by appointment. Principals only. HARFORD ENGINEERING CO., LTD., Whiting Road, Norwich.

AVAILABLE for use, 300-ton PRESS. We are well equipped, especially for lime 120t work. Heavy Salvage Work and TRANSPORT.

ELLIOTT, York 78160.

WANTED, good 19RB or 22RB EXCAVATOR, equipped with Forward Shovel, at reasonable price. Write Box P.2405, "The Contract Journal."

3/2 MIXERS 'Half-Bag'

FOR HIRE

30/- PER WEEK

PETROL OR ELECTRIC—I PHASE

JOHN MACNAMARA & CO. LTD., Bush Rd., Deptford, London, S.E.8 Bermondsey 3275-1435

WELDERS

1958

300 amp. LINCOLN PORTABLE DIESEL SETS

FOR HIRE

Very Keen Rates — For Long Term Hires

MOORE'S PLANT LIMITED

105-129 MARKFIELD ROAD, N.15

Phone: TOTtenham 0401/8

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

WILSON PLANT HIRE offer the following:
Murex WELDING SET, Type G8002, Serial No. 22675, 9-kW 30-V 300-Amp., with Perkins P4 engine, mounted two pneumatics, with towbar.
Murex WELDING SET, Type GC002, Serial No. 34112, 9-kW 30-V 300-400-Amp., with Perkins P4 engine, mounted two pneumatics, with towbar. Broadcast 14in. x 54in. S.S. Centre LATHE, motorised 3½in. hollow mandrel, 12 spindle speeds, 6.7-230, c/w 24in. face plate and 12in. 4-jaw chuck.
One 3in. Auto Diesel CENTRIFUGAL PUMP.
One 4in. Auto Diesel CENTRIFUGAL PUMP.
Several Paper 1/3 cu. yd. CONCRETE MIXERS.
SKIMMER BUCKET for Tiger Mk.V Excavator.

WILSON PLANT HIRE, LTD.
Weedon Road, Northampton. Telephone 4653/4.

JONES KL44 MOBILE CRANE, 4 tons capacity, new 1953, with Ruston Diesel Engine, 50ft. Lattice Jib, on 10-wheel wheels. Very good working order. £1,750.
Marion 33M EXCAVATOR, Serial No. 9036, G.M.C. Diesel Engine, rigged as Crane, 70ft. Jib, and Dragline Equipment (34yd. Bucket). Recently overhauled. £2,500.
Mark IV CATERPILLAR CRAWLER, with Bray Angledozer, new 1958. Good order throughout. £875.
Bray BL25 Crawler-mounted LOADING SHOVEL complete with cab. Very good order. £950.
WESTERN CONTRACTORS SERVICES, LTD., Hallen Works, Severn Road, Bristol.

STEEL SHEET PILES and TRENCH SHEETS urgently wanted. All sections bought, large and small quantities. Immediate payment.
DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

BIG CRANE EXCAVATORS

Several for Sale

A.R.C. MOTOR Co. Ltd.
REDHILL WORKS, ARNOLD, NOTTINGHAM
Telephone: 26-3331/5

WEATHERILL HYDRAULIC**F. E. WEATHERILL LTD
USED EQUIPMENT DIVISION**

We can meet your Used Loading Shovel requirements either at our main Works at Welwyn Garden City or our Depots at Walsall, Manchester, West Hartlepool and Bothwell.

1958 WEATHERILL Hydraulic Loader, Type 12H, with 3½ cu. yd. Scoop, powered by Fordson Diesel Engine, mudguards fitted and lighting equipment, 29 x 8 front and 1400 x 24 rear tyres, complete with driver's cab and £1,300.
1958 WEATHERILL Hydraulic Loader, front wheel drive model, Type 14H, with 3½ cu. yd. Scoop, Fordson Diesel Engine, 1050 x 16 steering and 1400 x 24 driving wheels, driver's cab and towing hitch £1,200.
1957 CHASESIDE Loadmaster 700, with 1 cu. yd. Scoop, powered by Fordson Diesel engine, power steering and lighting equipment £1,200.
1958 WEATHERILL Loader, Type 2HCR, with 3½ cu. yd. Scoop, powered by Fordson Diesel Engine, 1400 x 24 tyres, rear all tyres good £1,100.
1957 MERTON Dumper, with Fordson Diesel Engine, fitted with 1 cu. yd. Scoop with digger teeth, double-acting main rams, lighting equipment. This machine is in excellent condition, and all tyres are good £1,100.
1958 WEATHERILL Overloader, Type 4HTW, with Fordson Diesel Engine and ¾ cu. yd. Scoop £1,050.
1957 WEATHERILL Hydraulic Loader, Type 2HCRQ, with 3½ cu. yd. Scoop and straight toe plate, powered by Fordson Diesel Engine, towing hitch, fitted with 1400 x 24 tyres at rear £900.
1959 WHITLOCK Dozaloda, powered by Fordson Diesel Engine, 1400 x 24 tyres, rear all tyres good, complete with driver's cab and lighting £600.
1959 WEATHERILL Microloda Type P2 pedestrian-controlled Loader, used for demonstrations only £550.

Ask for fuller details of these and other machines from our most comprehensive stock.

**F. E. WEATHERILL LTD
USED EQUIPMENT DIVISION**

Tewin Road,
WELWYN GARDEN CITY,
Herts.

Tel: Welwyn Garden City 4221-5

FOR SALE.
Wallis and Stevens 2½-ton ROLLER, Coventry Diesel, Model OG/D, year 1957, little used and in excellent condition, water sprayers and supply tank, £1,150.
David Brown TRACKMASTER 30, with Blaw Knox Bulldozer Equipment. Manufacturer's reconditioned engine completely 40-hour service. Transmission completely overhauled. Numerous snarls fitted. Tracks reconditioned. Machine in first-class order. £700.
Acrow CEMENT SILO, with Twin Mono-Rail unused Weighing Equipment. £300.
Johnson 2-tool COMPRESSOR, good working order, £150.
Appl. W. STIRLAND, Birdham, Chichester.
Tel.: Birdham 381.

LIMA 1201 Heavy-duty CRANE, fully rigged with genuine American 100ft. Boom and Jib, to British maximum rated capacity, fully insured. Available for HIRE with skilled operator.
PLANT SALES, LTD.

25 Castlereagh St., London, W.1. PADDINGTON 2663/5.
CATERPILLAR 955 TRAXCAVATOR, Series E, with Cab, 1½ cu. yd. Side-tipping Bucket and Operator's Cab, supplied new April, 1959, price £5,750.
ABELSON AND CO. (ENGINEERS), LTD., Sheldon, Birmingham. Tel.: SHELDON 2424.

FOR SALE. Ransomes Rapier 425 ½ cu. yd. FORWARD SHOVEL, with all equipments. In excellent condition. Also original parts of SPARES. Write Box P.2293, "The Contract Journal."

WANTED. FORWARD SHOVEL EQUIPMENT, complete with DRAGLINE, FAIRLEAD and CABLE for Prismant Mk. V.—FRED. WATKINS (ENGINEERING), LTD., Coleford, Glos.



USED EQUIPMENT with a GUARANTEE

CHASESIDE
USED EQUIPMENT
DIVISION

IF YOU REQUIRE A RELIABLE USED MACHINE, YOU NEED LOOK NO FURTHER THAN HERTFORD.

Come and inspect our full stock, for in addition to the machines listed below, we have machines at prices to suit all requirements.

HYDRAULIC MACHINES:
Stock No. Net ex works
SK.1045.—1958 LOADMASTER 800TC, Ford 4D Diesel Engine, Cab, 1 cu. yd. Scoop. Excellent machine on good tyres. Class B warranty. £1,500
SK.1180.—1957 LOADMASTER 800TC, Ford 4D Diesel Engine, Cab, Lighting 1 cu. yd. Toothed Scoop. Good tyres. Very sound condition throughout. Class B warranty. Seen HERTFORD £1,650
SK.1181.—1956 LOADMASTER 500, Ford 4D Diesel Engine, Open-sided Cab, 1 cu. yd. Scoop. Very good tyres, rear 1400 x 24. Class B warranty. Seen HERTFORD £1,200
SK.1182.—1957 LOADMASTER 700, Ford 4D Diesel Engine, All-weather Cab, 1 cu. yd. Scoop. Good tyres, rear 1400 x 24. Class B warranty. Seen HERTFORD £1,375
SK.1205.—1954 WEATHERILL 2H, Ford 4D Diesel Engine. In very good condition, on good tyres. Offered at a very attractive price. Class B seen HERTFORD £650
The following Hydraulic Loaders will be ready for work and available day
SK.1082.—1958 LOADMASTER 700, Ford 4D Diesel Engine, All-weather Cab, Power Steering, Lighting, 1 cu. yd. Scoop. Class B warranty. Seen HERTFORD £1,675
SK.1200.—1956 LOADMASTER 500, Ford 4D Diesel Engine, All-weather Cab, Power Steering, Lighting, 1 cu. yd. Scoop. Class B warranty. Seen HERTFORD £850

BACKHOE AND SWING SHOVELS:
SK.1153.—1958 Self-propelled Hopper, Fordson Diesel Engine, 24in. Backhoe Bucket, Trench depth 11½ ft. Loading height 9½ ft. 180° swing on turnpost £1,350

DUMPERS:
D3/FO/500.—1958 CHASESIDE 3½ cu. yd. Dumper, Fordson Diesel Engine, Cab, Lighting. Overhauled and repainted. Seen HERTFORD £1,000
D5/FO/603.—1958 CHASESIDE 4½ cu. yd. Hi-Speed (little used), Fordson Diesel Engine, All-weather Cab, Lighting, Standard Hopper, fast hydraulic discharge. Two-way steering, Servo-assisted hydraulic brakes on all four wheels. Excellent machine with full guarantee £1,950

The following machines are offered at specially low prices to customers who have the facilities to carry out their own repairs:
SK.1228.—1952 WEATHERILL 2H, Fordson T.O.V. Engine. Seen HERTFORD £250
SK.1230.—1954 WEATHERILL 2H, Ford 4D Diesel Engine. Seen HERTFORD £325

Send for full particulars to:
CHASESIDE ENGINEERING CO., LTD.,
Used Equipment Division,
Station Works, Hertford, Herts.
Tel.: Hertford 3113-8.

TAS/UED78

C R A N E S FOR HIRE.
15cwt. GM Neals Fully Mobile Diesel Cranes, 18ft. Straight and 20/40ft. Telescopic Jibs.
15cwt. Jones KL15 Self-propelled Diesel Cranes, 15/20ft. Straight Channel Jibs.

2-ton Neals Diesel Mobile Cranes, on pneumatic, 2½ ton, Straight Lattice Jibs.

3-ton Jones Diesel Crawler-mounted Cranes, 30/40ft. Straight Lattice Jibs.

4-ton Jones KL44 Diesel Crawler Cranes, 30/45ft. Straight Lattice Jibs.

4-ton Jones KL44 Diesel Mobile Cranes, on pneumatic, 30/45ft. Straight Lattice Jibs.

Smith 21 approx. 10-ton capacity Crawler-mounted Cranes, 70ft. Box Lattice, with 10ft. Fly Jibs.

5-ton Colas Diesel Lorry-mounted Cranes, various length Jibs.

10-ton Colas Diesel Lorry-mounted Cranes, various length Jibs.

Hire your Cranes at most competitive rates from the Crane Specialists:

MOORE'S PLANT, LIMITED,
105-129 Markfield Road, Tottenham, N.15.
Tel.: OTTENham 0401 (10 lines).

FOR SALE. Rapier 410 EXCAVATOR, with Four-purpose Equipment, Perkins P4 Engine, 1951, recently overhauled and in perfect working order. £730 or offers.—BAGGULEY AND BARKER, LTD., 133 North Sherwood Street, Nottingham. Tel.: Nottingham 45828.

FOR SALE. 19RB EXCAVATOR, 10000 Series, Dragline equipment, excellent condition, £1,750.
DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

STEEL SHEET PILING WANTED

All sizes and lengths of Larsen and Frodingham PILING.—Please send details, including location and price, to:

AXWORTHY AND COMPANY, LTD.,
4 Ouseley Road, Old Windsor, Berks.
Telephone: Windsor 60668.

PLANT FOR SALE**DINKUM DIGGERS:**

Under £1,000:
1956 Dinkum, all Hydraulic, including Dozaloda Front Shovel, Late type Fordson, electrics, cab and general condition excellent. Overhauled and repainted in our works. Sold with guarantees... £675

1954 Dinkum Mark III, in fair working order. Cab, Diesel, electric start £600

Machines can be seen at Hertford or demonstrated at your site. Standard and special buckets available. There are no better machines in this class of hydraulic excavators.

Over £1,000:
Latest type Dinkum Major. All Hydraulic, full equipment, including All-weather Cab, Diesel Engine, Electrics. First-class, overhauled as necessary in our works, repainted, new tyres all round £1,775
Latest type Dinkum Major. All Hydraulic, full equipment, including All-weather Cab, Diesel Engine, Electrics. First-class, overhauled as necessary in our works, Repainted £1,600
All machines guaranteed.

We are MAIN DISTRIBUTORS for DINKUM DIGGERS in Herts., Bucks., Beds. part Middx.

GENERAL PLANT:

1948 Super 10. Equipment includes Backacter and Skimmer, Gardner Diesel Engine. Tracks and clutches worn but in working order. Excellent value at £590

Bray BL430. This machine, first used December, 1957, is four-wheel-drive Diesel Loading Shovel, 1 cu. yd. Bucket. Repainted as necessary, repainted new. Tyres 1200 x 24 rear, 1100 x 24 front. All-weather Cab, Lights. Guaranteed £1,250

County Crawler Bulldozer, 8ft. Blade, £400 just spent in our own workshops on engine and transmission overhaul. Diesel Engine 4D, 14in. tracks £550

International TD18A, with Angledozer and Winch. Good condition £1,700

International TD14A, with Angledozer and Winch, Retracted and completely overhauled £1,500

One 1957 Weatherill Loading Shovel, Model 2HCR, complete with all-weather cab. Good working order £925

1936 12/18 Allen-Parsons Trencher, new Gardner Engine, Pinto tracks, 500 hours only. Ready for work £350

Special low price delivery terms arranged, and unless stated otherwise, all machines displayed at our Hertford works.

DIAL-MEC LTD.
CAXTON HILL, HERTFORD

Tel: Hertford 3175/6

MOORE'S EXCAVATOR HIRE

Ruston Bucyrus 3, 5 and 7 cu. yd., all equipments.

Tel:
TOTtenham
0401
(10 lines)

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR SALE.
5-ton Butters Single-motor Electric DERRICK CRANE, 85ft. Jib.
2-ton Butters 2-motor Electric DERRICK CRANE, 45ft. Jib.
HDSG and HDGG TRACTO-SHOVELS.
Caterpillar No. 6 2½yd. SHOVEL. Reconditioned.
4in. Johnson Portable Diesel PUMPING SET. Recond.
1in. and 1 cu. yd. Johnson Diesel DUMPERS.
Overhauled.
Larsen and Appleby-Frodingham STEEL SHEET PILES.
No. 1, 2, 3 Sections.
No. 16 Spencer-Hopwood BOILER, fully insured, 120lb.
No. 16 McKiernan-Terry PILING HAMMER, with leg guides.
2-Tool Broomwade PORTABLE COMPRESSOR, Lister Diesel.
TRENCH SHEETS, 10ft. and 12ft.
P15 PORTASILOS. New 1959 and 1958.
P15 PORTASILOS. New 1957.
2-ton Neals N CRANE, 20ft. Jib, reconditioned engine.
Ruston Diesel LOCO., 2ft. gauge, 25/30-h.p. engine.
DUDLEY VALE, LTD.

3 Buckingham Place, London, S.W.1. VICtoria 0252.

WANTED BY CONTRACTOR.
Two 19RB EXCAVATORS, with Shovel or Dragline Equipment.

One 19RB EXCAVATOR, with Dragline Equipment.

One Caterpillar D9.

One 40t SCRAPER.

Three Caterpillar D7 Hydraulic ANGLEDOZERS.

Model 3T.

One Caterpillar D6 Hydraulic ANGLEDOZER.

One Model 955 TRACTOR SHOVEL.

Two Caterpillar D4 Hydraulic ANGLEDOZERS.

Send full details and price to:

Box K.K.387, "The Contract Journal."

FOR SALE.

One 19RB F/S.

One 19RB Backhoe F/S.

Several D8 and D7. Choice of many.

DURCAN AND McGOWAN, LTD., Eldon Buildings, Eldon Street, Barnsley, S. Yorks.

Telephone: Barnsley 2059.

SALE OR HIRE. 85-h.p. standard gauge Diesel LOCOMOTIVE, weight 16 tons, by Motor Rail.

JOSEPH PUGSLEY AND SONS, LTD., Bristol, S. Telephone: Bristol 56037.

STOTHERD AND PITT 28W Vibroll ROLLERS, for immediate delivery, £328 each.—ABELSON AND CO. (ENGINEERS), LTD. Tel.: SHEldon 2424.

FOR SALE. One Caterpillar D7 BULLDOZER.

Model 7M.

Write Box P.2396, "The Contract Journal."

SLOGGETTS PLANT HIRE. Fleet of DIGGER-LOADERS for Immediate HIRE.—2 Burtons Road, Hampton Hill, Middx. Tel.: Teddington Lock 1138/9.

HAVE CASH—WILL TRAVEL

If you have SURPLUS PLANT but prefer surplus cash—if you wish to sell but have no time for so-called agents—if you are satisfied with a reasonable price for your surplus plant—then contact, with date, condition and price:

FIELDS.
Forest Edge, Ringwood Road, Ferndown, Dorset.

ERNEST DOE AND SONS, LTD.

Offer for quick delivery ex Croydon:
The new J.C.B. 4 Hydraulic EXCAVATOR and Loading Shovel, complete with full range of Buckets and Special Equipment and all J.C.B. Spares.

J.C.B. 4 Hydraulic EXCAVATOR and Loading Shovel, complete, £2,525 ex works, plus Buckets.

1950 J.C.B. HYDRA-DIGGA/LOADALL, used as demonstrator, for quick sale £1,950, plus Buckets.

1950 J.C.B. HYDRA-DIGGA COUNTERWEIGHT, used as demonstrator, for quick sale £1,625, plus Buckets.

1955 J.C.B. Hydraulic EXCAVATOR, overhauled, £850.

1954 J.C.B. Hydraulic EXCAVATOR, with Front Loading Shovel, £795.

Several Dinkum DIGGERS, prices from £450 to £1,250.

Several Dinkum Majors, as seen on site, £1,450.

Bray Hydraulic LOADING SHOVEL, powered by Perkins 16 Diesel Engine with 5 cu. yd. Bucket.

Good tyres. All in good working order, £350.

New Type Dofson Major Diesel TRACTOR, with electric start, hydraulic lift and linkage, never remoulded, 11 x 36 rear pneumatics, good 600 x 9 fronts. Overhauled and resampled, £350.

County BULLDOZER, powered by Ford 4D Diesel Engine and fitted Bray Hydraulic Angledozer.

Overhauled throughout, £1,050.

Fiat SSL BULLDOZER, wide gauge, wide tracks, fitted Mackay Hydraulic Angledozer. Overhauled throughout. Immediate delivery, £1,250.

Howard Rotary Hoe TRENCHER, powered by Ford 4D Diesel Engine and fitted Rotated Tracks.

Cuts drainage trenches 8in. wide 42in. deep, complete with Pipeplayer. These machines are in short supply, £1,050.

1959 Shawnee Poole Model 7 REAR DUMP, £1,650.

Bray BL430T 4-wheel drive LOADING SHOVEL, torque converter, £2,450.

Bray BL430 4-wheel drive 1 cu. yd. LOADING SHOVEL, £1,750.

SPARES ex stock Croydon: J.C.B., Petter, Thwaites, Ford County, Shawnee Poole, Dinkum, Perkins, plus Immediate Site Service.

ERNEST DOE AND SONS, LTD.

Therapia Lane, Mitcham Road, Croydon, London.

Telephone: Thornton Heath 4544 (day and night).

FOR SALE.

Caterpillar D4 and Birtley Dozer, reconditioned, £1,500.

Caterpillar D2, fitted L.P.C. Dozer, £650.

Allis Chalmers HD7W, fitted Baker Hydraulic Angle-doxer and Double Drum Winch, reconditioned, £950.

International TD18, fitted Dozer and Winch, £650.

International TD10, fitted Dozer, £450.

Johnson COMPRESSOR, 2-tool, Petrol, £75.

Dinkum DIGGER and Two Buckets, as new, £350.

Allis-Chalmers HD7 Tracks new.

A.E.C. TRACTOR UNITS fitted Gardner SLW, Hands, 15-ton, and Well Tractor, £450.

OIL: High-grade Engine and Gear Oil in 4½-gallon Jerry cans, 25s. each.

ROBIN BOSWORTH, Tel.: Stoke Saint Milbro 237. Nr. Ludlow, Shropshire.

D R O T T 4-in-1 SKID SHOVELS for SALE.

Hire fleet owners have three 1yd. machines for immediate sale, following decision to replace with larger machines. These machines are available for sale singly, but a bulk offer would be considered. Each machine is fitted with a cab and 4-in-1 equipment, has been well maintained and was completely overhauled in 1959. The machines, which are currently working, are: No. 5187, new 1957, £2,000; No. 5167, new 1958, £2,250; No. 7130, new 1959, £2,350.—Write Box P.2406, "The Contract Journal."

Tel.: Stoke Saint Milbro 237. Nr. Ludlow, Shropshire.

CHATFIELD Multi-purpose Roller CONCRETE POURING SKIP, which offers the advantage of BOTTOM DISCHARGE or FRONT DISCHARGE from the one unit at a total price only a little above the cost of existing single-purpose skips. For SALE and HIRE.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersby, London, S.W.1. Telephone: BAttersby 9213.

M E T A L S U P P L I E S. Broad Street Chambers, Sheffield 2. Telephone 27710.

F O R S A L E. BTD6 Drott 86K3, 1yd. Bucket, with separate Dozer Blade, 1958 machine, Price £1,950.

BTD6 Drott 86K3, 1yd. 4-in-1 Bucket, 1959 machine, Price £2,350.

PLANT SALES. 20/30cwt. FOOTPATH ROLLERS.

5/10cwt. ACE HOISTS, Soft. Masts.

CHINOOK HEATERS, Petrol and Electric.

2-Tool PORTABLE COMPRESSORS.

Please write or telephone:

A. J. PHILLIPS, LTD.

Metropolitan Works, West End Lane, London, N.W.8. Telephone: Maids Vale 3406/2055/4807.

D E L M A G Diesel PILE HAMMERS for HIRE.

In Britain. Models D12 and D22 available with rope suspended leaders and leg guides, suitable for driving any section of pile.

D U D L E Y V A L E , L T D .

3 Buckingham Place, London, S.W.1. VICtoria 0252.

ONE unused Double-rope Cactus GRAB, about 1 cu. yd. ideal for handling scrap, will pick up about 14 standard bales in one operation. Cost new £850, our price £450 f.o.v.—Photograph and specification to BOWMAN'S, Ballards Wharf, Poole Quay, Poole 334.

R E M E M B E R that **PLANT SALES, LTD.** have the finest fleet of Heavy-duty Lima CRANES for HIRE. Consult them about your craneage problems.

PLANT SALES, LTD. 25 Castlereagh St., London, W.1. PADdington 2663/5.

FOR SALE. 8cwt. Greens VIBRATORY ROLLER, ex stock.—HENRY BOOT AND SONS (PLANT), Callywhite Lane, Dronfield, Sheffield. Telephone: Dronfield 3206.

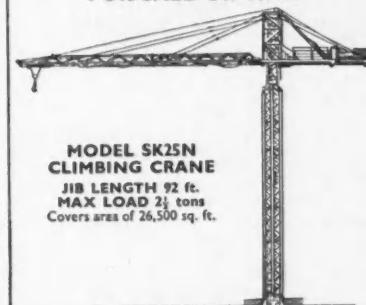
W A N T E D or similar in lengths of 15ft. and over. Write Box P.2409, "The Contract Journal."

W A N T E D, late D7 or D8 TRACTOR, base machine acceptable, or with Dozer and Winch. Write Box P.2406, "The Contract Journal."

W A N T E D, 38RB or 43RB EXCAVATOR, with Shovel and Dragline. Urgent. Write Box P.2407, "The Contract Journal."

Buildmaster regd. CRANES

FOR SALE OR HIRE



MODEL SK25N

CLIMBING CRANE

JIB LENGTH 92 ft.

MAX LOAD 2½ tons

Covers area of 26,500 sq. ft.

BACKED BY REAL SERVICE

ABELSON

& CO. (ENGINEERS) LTD.

SHEDDON • BIRMINGHAM 26

Phone : SHEDDON 2424 (10 lines)

Grams : ABELSON, BIRMINGHAM

FLYGT PUMPS FOR HIRE

All sizes of Flygt Electric Pumps available for hire (ex-stock)

Range includes 1½in., 3in., 6in., and 8in. deliveries

INDUSTRIAL PUMPS LTD.

20 BENTINCK ROAD, HYSON GREEN,
NOTTINGHAM Telephone 75182-3

FOR HIRE

SIDEBOOM TRACTORS

TRACTORS: HD7, HD10, HD14, Dozer or Scrapers.

D4, D6, D8, Dozer or Scrapers.

TRACTO-SHOVELS: HDSG, with 1½ cu. yd. Bucket.

HD9G, with 2½ cu. yd. Bucket.

EXCAVATORS: 10RB, 19RB, all equipments.

J.C.B. Hydra-Digga, all equipments.

DUMPERS: Aveling, 4½ cu. yd.

Rob Roy, 18cwt.

ROLLERS: 5-ton and 8-ton, Diesel.

CRANES: 5-ton and 10-ton, lorry-mounted.

30-60ft. Jibs.

PUMPS: 5/3½, 7/5, 10/7, 14/10.

TIPPING LORRIES: Austin 6 x 4.

All inquiries to:

G. CARTER & SONS, LTD.

YOKESFORD HILL, ROMSEY, HANTS.

Telephone: Braishfield 395/6/7.

MOORE'S PORTASILO

HIRE

10 to 20 ton.

Tel:
TOTtenham
0401
(10 lines)

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

V A L E S P L A N T R E G I S T E R .
FOR IMMEDIATE SALE:
EXCAVATORS:

10RB, 16800 Series, Skimmer and Backacter, very good condition, £1,650.
 10RB, 22000 Series, F/S, very good condition, £2,500.
 10RB, 13400 Series, Skimmer and Backacter, £1,050.
 PRIESTERSON WOLF (A), Skimmer and Backacter, 1951, good working order, £850.
 19RB, 17600 Series, F/S or Dragline, very good order, £3,250.
 19RB, 22000 Series, F/S, very good order, £4,300.
 NCK304, 1650 Series, Crowd Shovel Equipment, very good condition, £3,150.
 22RB, 1500 Series, very good condition, £3,750.
 33RB, 9800 Series, Dragline, good working order, £3,250.
 38RB, 17000 Series, F/S and Dragline, £8,000.
 43RB, 18300 Series, Dragline and F/S, new August, 1958, very good condition, £9,250.
 LIMA 1201, Dragline, F/S, 1958, and 32000 Series, £5,000 and £8,000, respectively.
 54RB, 22000 Series, Dragline, 1958, excellent condition, £18,750.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE—SEND FOR VALES FREE PLANT REGISTER.

Further details: 14 Lower Grosvenor Place, London, S.W.1. VICTOR 7531, 3501, 8080, 9886 (15 lines).

F O R H I R E .
 D4, D8 and HD20 TRACTORS, Angledozer, Caterpillar D7 HYSTERWAY.
 Caterpillar 977 TRAXCAVATOR.
 Euclid 15-ton, 22-ton and 27-ton TRUCKS.
 Reich and Alcan MOBILE PULLING RIGS.
 SWIE VIBRO-UNIVERSAL SPREADERS.
 Barber-Greene SPREADERS, Model 897A.
 Benford CONCRETE ELEVATORS.
 RUDDOCK AND MEIGHAN, LTD.,
 London area: Harrow 2278; Yorkshire: Barnsley 5861.

F O R S A L E .
 No. 1 DINIKUM DIGGER MAJOR, No. 2001, mounted on a Fordson Major Diesel Tractor, with 60in. Forward Power Shovel and 18in. and 24in. Excavator Buckets, in good working order. Lying Birmingham: can be seen on appointment. Telephone Aston Cross 2865.

FOR HIRE
All Contractors' Plant
SLOGGETTS (ENGINEERING) CO. LTD
HAMPTON HILL, MIDDX. Teddington Lock 1138/9

PUMPING MUD?
 you need a
MUD MARVEL'
 BUY OR HIRE from the sole makers W.G.
SEARCH WHITEHALL RD. LTD. LEEDS. 12.

WALTER LLEWELLYN & SONS LTD.

have
FOR SALE
 SURPLUS TO OUR REQUIREMENTS

10RB, Series 10358, Skimmer/Backacter	£850
10RB, Series 11695, choice of equipments	£950
J.C.B., 1954 model, good order	£700
J.C.B., 1957 model, good order	£775
J.C.B., 1956 model, Front Loader	£775
County Crawler Dozer, 1954	£700
County Crawler Dozer, 1957	£900
Hanomag K90E, base machine	£1,250
Hanomag K90E, Hydraulic Dozer and P.C.U.	£2,250
Hanomag K90E, P.C.U. and 8yd. Onions	£2,750
Chaseside Loadmaster 500, 1956	£700
Holman 2-Tool Compressor, lorry-mounted	£100

WALTER LLEWELLYN & SONS LTD.

16-20 SOUTH STREET • EASTBOURNE
 The South Coast Plant Hirers
 Tel: Eastbourne 8080

P L A N T F O R S A L E .
 8½-ton Diesel ROAD ROLLER, by Barford-Perkins (Pioneer), Type THD, in very good working order, £465.

Ruston 6yd. SCRAPER, new 1100 x 20 rear tyres. 2½-ton very good condition, £295.

One 3½-ton 10ft. Four-wheel DUMPER, Petter Diesel Engine, £155.

Muir-Hill OVERLOADER, Ford 4D Engine, Type SSD, 1953 machine in outstanding condition, £325.

Jones Super 20 2-ton MOBILE CRANE, on pneumatics, twin cylinder Diesel Engine, in very good working order, £3,250.

Three Diesel 300-amp Mobile ARC WELDERS, by Murex, Lincoln and Petbow, from £195 each.

10,000lb. FORK LIFT TRUCK, by Cranemobile of Canada, 11ft. lift, powered by 6-cyl. Petrol Engine, complete with 12ft. Boom for Crane Attachment. Manufactured 1945. Pneumatic tyres all round.

Mobile 1-ton Neals CRANE on 1950 Austin chassis. Unit and crane both with new engines, £325.

G. H. DUNNING,
 Ballards Yard, High St., Edgware. Tel: Edgware 2572.

Open week-ends.

F O R S A L E O R H I R E .

5½-ton Winget, Maximixams, Parker, Benford and Liner CONCRETE MIXERS, on four steel wheels, fitted with petrol engines, in good working order, from £35.

5½-ton Benford Model CRW CONCRETE MIXERS, on four steel wheels, fitted with Petter Diesel engines, in good working order. Some reconditioned, 15 available.

5½-ton Maximixams and Winget, fitted with Lister and Petter Diesel Engines, reconditioned and guaranteed.

10/7 Parkers Stoer and Pitt, Winget, and Ransomes and Ransome and Rapier.

14/10 Millars and Blaw Knox.

50/100 machines usually in stock.

New 4/3 and 5½-ton Barford CONCRETE MIXERS for immediate delivery.

W. V. DAVIES, Concrete Mixer Service, Shipston-on-Stour. Phone 125.

CHEAP DIGGERS.

1942 Priestler Wolf A316S, Diesel, Skimmer and Trencher, chain drive, 18in. tracks, steel Cab, £650.

1946 2/10 Smith, Fowler Diesel, steel Cab, Face Shovel Equipment, £400.

WILLIAM R. SELWOOD, LTD., Chard's Ford, Hants. Phone 2981.

WANTED to PURCHASE for Pound Notes. Redundant CRAWLERS, BULLDOZERS, CRANES, HEAVY MACHINERY, etc. References furnished. SITES CLEARED — cash before removal. SHELTON, Bulby, Bourne, Lincs. Edenham 223/4.

F O R S A L E . 4½ cu. yd. Aveling-Barford DUMPER, Dorman Diesel, Skip and tyres excellent. WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel: 639081 (10 lines).

FOR SALE

ALLIS-CHALMERS:

1944 Allis-Chalmers HD7, fitted with Hydraulic Angledozer and complete with P.C.U. and 4yd. Scraper, £700.

1949 Allis-Chalmers HD5G Tractor Shovel (choice of four), from £1,300.

1954 Allis-Chalmers HD5G Tractor Shovel, overhauled, track group, £2,750.

1955 Allis-Chalmers HD5G Tractor Shovel (choice of three), from £2,750.

1958 Allis-Chalmers HD11G Tractor Shovel, overhauled, track group, £6,500.

FIAT:

1951 Fiat 55L, fitted with Hydraulic Angledozer, £850.

1952 Fiat 55L, fitted with Hydraulic Angledozer (reconditioned engine), £950.

1954 Fiat 55L, fitted with Hydraulic Angledozer, £950.

FORDSON COUNTY CRAWLER:

Fordson County Crawler, fitted with Hydraulic Angledozer, recently overhauled, £850.

WINCHES:

Cärco E Timber Winches, overhauled, £350.

MACKAY**of Feltham**

Mackay Industrial Equipment Ltd., Central Way, Feltham, Middx. (Feltham 3435-9)

There is no better medium than

THE CONTRACT JOURNAL

for small classified
 advertisements

Telephone for
 LINAGE RATES to
 WATerloo 3411

A B E L S O N

Offer the following CRAWLER TRACTORS FOR SALE:

Track-Marshall Industrial 50-h.p. Crawler TRACTOR, with Marshall Hydraulic Angledozer and Onions C.C.U., supplied new February 1958.

Track-Marshall Industrial 50-h.p. Crawler TRACTOR, with Marshall Hydraulic Angledozer and Onions C.C.U., supplied April 1958.

One New and Unused Track-Marshall TRACTOR, with 55-h.p. engine fitted, with Marshall Hydraulic Angledozer and Onions C.C.U.

Fowler Challenger III TRACTOR, with Leyland Engine, fitted with Bray Hydraulic Angledozer and Onions C.C.U., supplied new August 1956.

Fowler Challenger III TRACTOR, with Meadows Engine, fitted with Bray Hydraulic Angledozer and Onions C.C.U., supplied new May 1956.

Also Two LeTourneau Model LS 15 cu. yd. capacity SCRAPERS, for use with the above. Serial Nos. 15806 and 15137.

Inquiries to:
 ABELSON AND CO. (ENGINEERS), LTD., Sheldon, Birmingham, 26. Tel.: Sheldon 2424.

C R A N E S F O R S A L E .

Lorain MC3 Moto, fitted Cummins Diesel Engine, 60ft. jib.

Michigan 76K Mobile, fitted Hercules Petrol Engine, 40ft. Crane Jib, and with Skinner, Trencher and Shovel Equipments.

Michigan 76K Mobile, fitted Dorman Diesel Engine, 35ft. Crane Jib, and with Skinner, Trencher and Shovel Equipments.

L. NELSON AND CO., LTD., Lugtrout Lane, Solihull, Warwickshire. SHE 4005/4443.

F O R S A L E .

One Le Tourneau LS 9yd. SCRAPER, new and unused, ex Ministry, 1100 x 20 rear tyres. Price £1,000.

Caterpillar D9, Model 19A, 2,000 hours only, guaranteed. Bulldozer cable-operated, and Caterpillar Model 9G C.C.U. Driver's Cab. One driver only since new.

W. ELLIOTT AND SONS (YORK), LTD., 67 Wetherby Road, York.

Telephone: York 78220 (after hours, York 71194).

F O R S A L E .

Ruston-Bucyrus 27T BLAST HOLE DRILLS.

Lima 34 and 802 EXCAVATORS, Shovel and Dragline.

Euclid 27FD TRUCKS.

Scarpa 1200 TRACTOR.

Rex CONCRETE MIXERS.

Lister AUTO TRUCKS.

Write Box 22357, "The Contract Journal."

J. C. B. HYDRA-DIGGA/LOADALL 65, new January 1960, complete with Buckets, power steering, etc. This machine is as new, only having done 400 hours; it has been owner-driven and carefully maintained. Will accept £1,850 o.n.o. — Write Box 22357, "The Contract Journal."

F O R S A L E . a good modern Lima 2400, on long and wide tracks, Dragline. Excellent condition. — PLANT SALES, LTD., 25 Castle Street, London, W.1. Tel: Paddington 2663/5.

F O R S A L E .

CATERPILLAR TRACTORS AND EQUIPMENT: not more than five years old.—Phone Rothwell 3258, TD 25 Castles Street, London, W.1. Telephone: Paddington 2663/5.

W A N T E D : CATERPILLAR TRACTORS.

TRAXCAVATORS AND EQUIPMENT: not more than five years old.—Phone Rothwell 3258, TD 25 Castles Street, London, W.1. Telephone: Paddington 2663/5.

F O R HIRE . 19RBs and 33RBs, TD and HD14s, and Merton OVERLOADERS.—SAND AND SHINGLE LTD., Faggs Road, Feltham, Middx. Feltham 3043.

HIRE
Sarton
COMPRESSORS
DUMPERS
VIBROLLS
PNEUMATIC TOOLS

Sarton
 LTD.
 Head Office & Works
 ESKDALE ROAD, INDUSTRIAL ESTATE
 UXBRIDGE, MIDDX. Uxbridge 8644-5-7

NORTH-WESTERN
 Manchester
 Ardwick 6192

MIDLANDS
 Walsall
 Bloxwich 75219

NORTH-EASTERN
 Darlington
 Aycliffe 2277

SOUTH WALES
 Bridgend
 Bridgend 1170

July 28 1960

THE CONTRACT JOURNAL

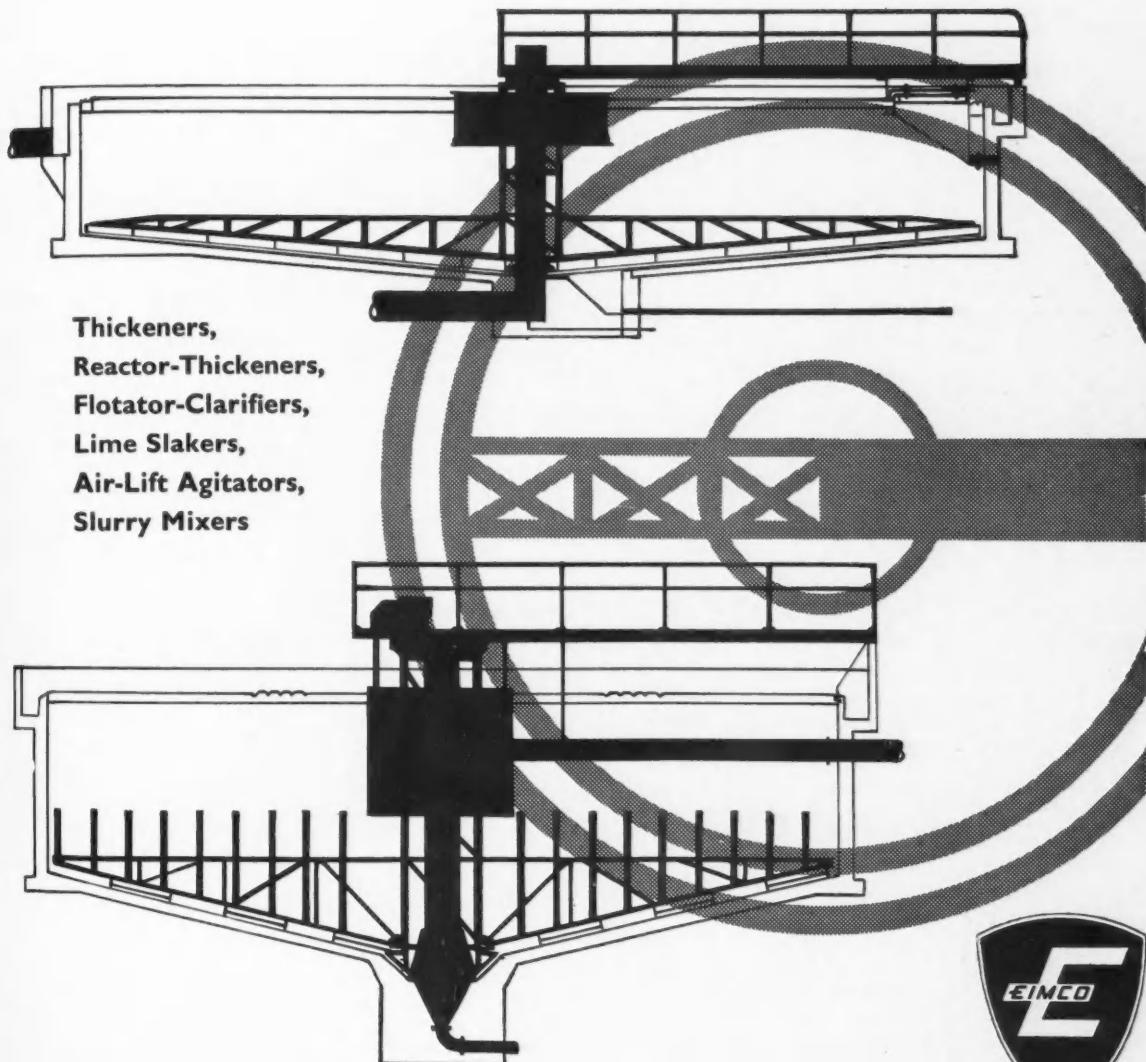
v a

EIMCO PROCESS EQUIPMENT

now available

FROM BRITISH PRODUCTION

For Sewage and Industrial Waste Treatment



Thickeners,
Reactor-Thickeners,
Flotator-Clarifiers,
Lime Slakers,
Air-Lift Agitators,
Slurry Mixers



Write NOW for details:—

EIMCO (GREAT BRITAIN) LIMITED

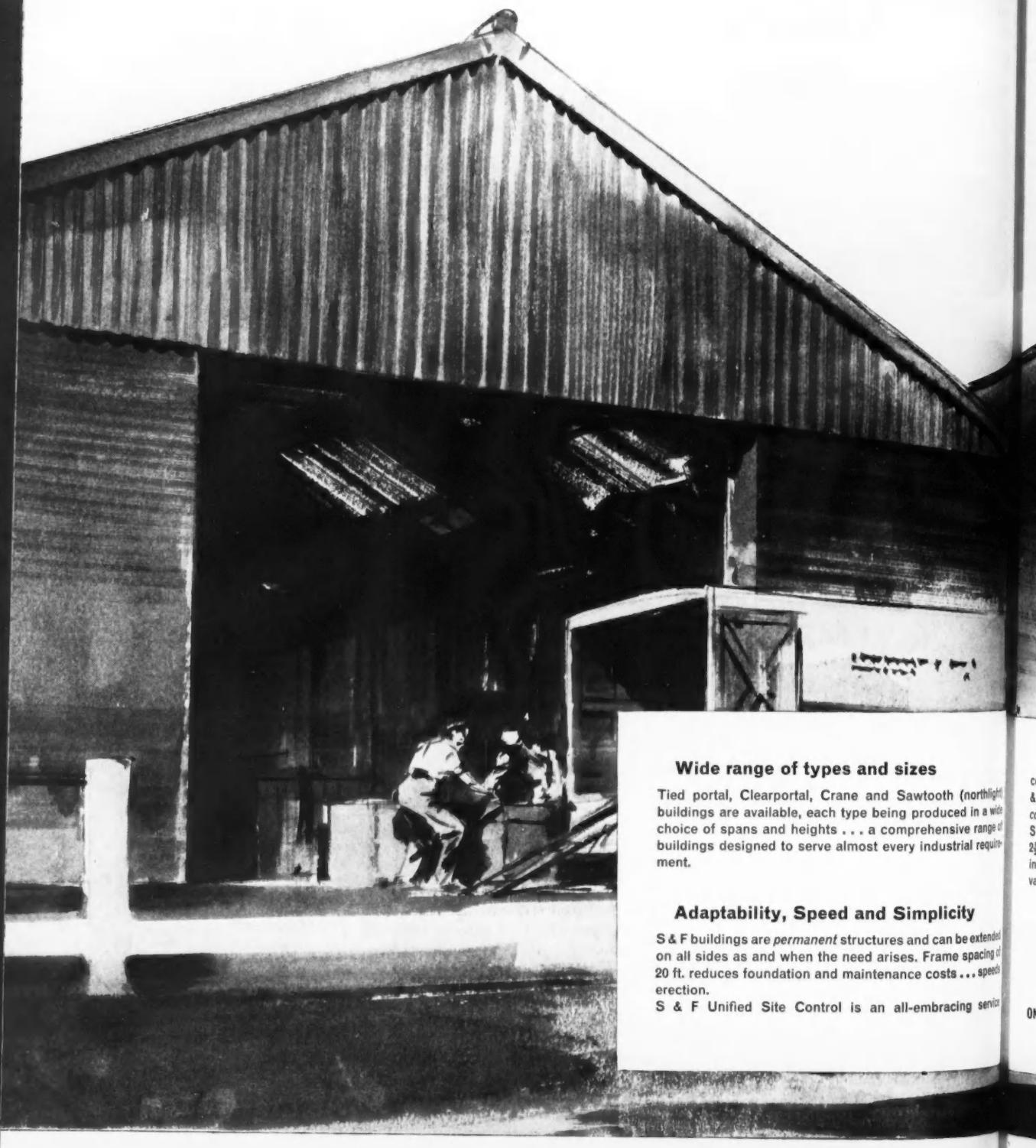
Head Office and Works: TEAM VALLEY, GATESHEAD, II, CO. DURHAM. LOW FELL 7-7241

London Office: PRINCES HOUSE, PICCADILLY, W.I. REGENT 3184

P.2609

S & F

STANDARD STEEL



Wide range of types and sizes

Tied portal, Clearportal, Crane and Sawtooth (northlight) buildings are available, each type being produced in a wide choice of spans and heights . . . a comprehensive range of buildings designed to serve almost every industrial requirement.

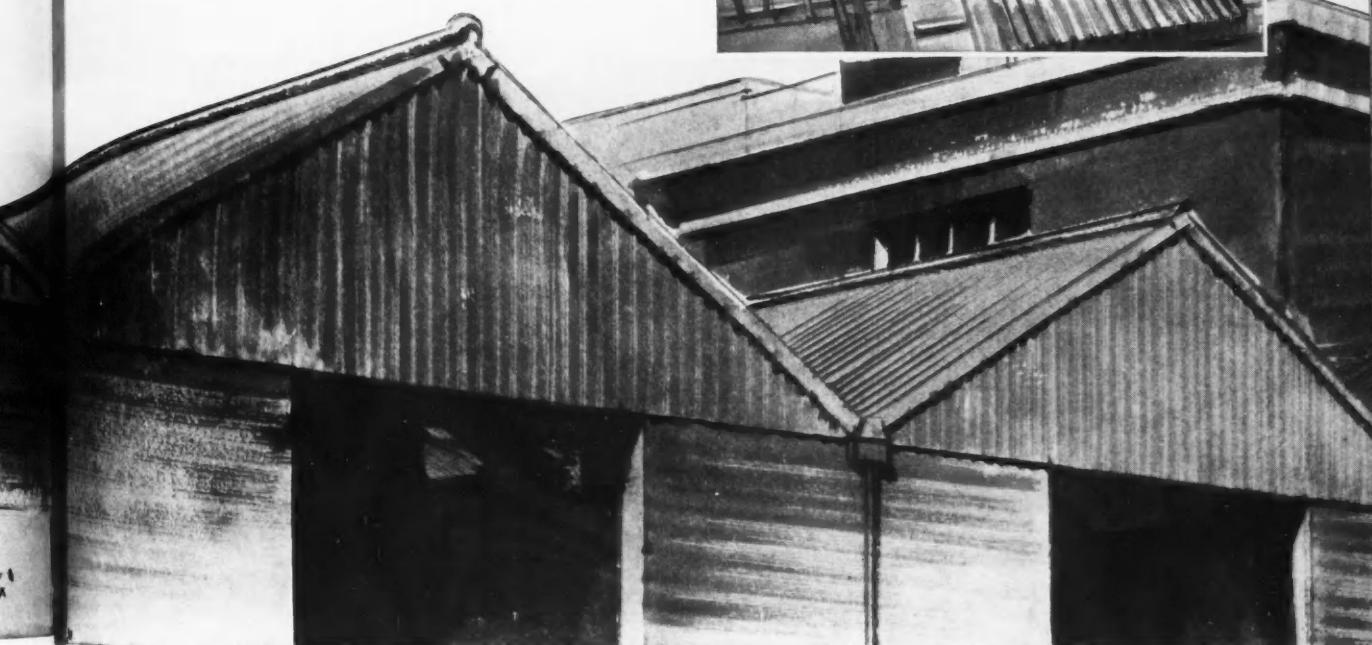
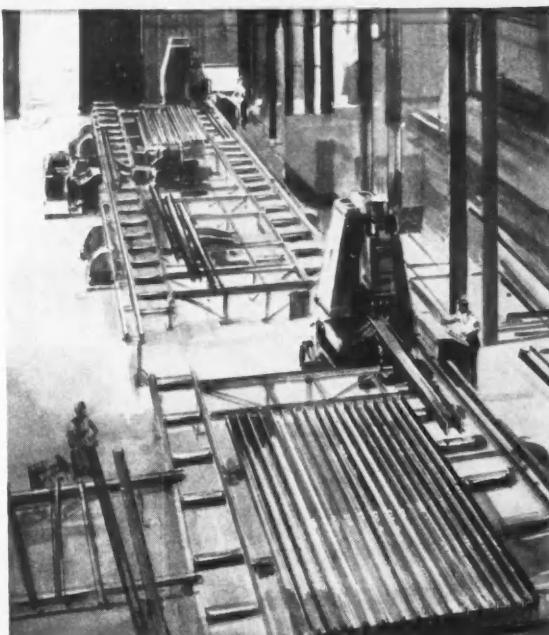
Adaptability, Speed and Simplicity

S & F buildings are permanent structures and can be extended on all sides as and when the need arises. Frame spacing of 20 ft. reduces foundation and maintenance costs . . . speeds erection.

S & F Unified Site Control is an all-embracing service

BUILDINGS COST LESS BECAUSE....

...a completely mechanised fabricating technique reduces costly man-handling of materials ... reduces labour requirements ... keeps work flowing smoothly and fast... makes *big savings* in production costs — *savings that are passed on to the purchaser.*



covering steel erection, cladding and insulation by SANDERS & FORSTER'S own skilled teams—a service that ensures completion on time. S & F standard buildings are being erected at the rate of 2½ million square feet each year, serving industrial activities in the United Kingdom and overseas territories in widely varying climatic conditions.

SANDERS & FORSTER LTD

ONE OF THE CHAMBERLAIN GROUP OF COMPANIES

This Brochure illustrates how S & F buildings can solve factory accommodation problems quickly, permanently and at low cost. Have you had a copy?



(Dept: CJ 14)

3 BUCKINGHAM PALACE GARDENS, LONDON, S.W.1.

Telephone: SLOane 0833 (10 lines). Cables: Sanforsted, London.



ARUP & ARUP LTD. • BILTON HOUSE • 54/58 UXBRIDGE ROAD • EALING • LONDON W.5

ALLAM

VIBRATING TAMPERS

FOR ALL CONCRETE ROADS, FLOORS, AREAS, etc.



THE FINEST TAMPING EQUIPMENT AVAILABLE.
MODIFIED DESIGN INCORPORATING:

- ★ INTERCHANGEABLE VIBRATING UNITS FOR ROAD WIDTHS UP TO 20' USING ONE MACHINE.
- ★ AUTOMATIC FORWARD TRAVEL.
- ★ VIBRATOR AND BRACKET, STEEL FABRICATED, NO CASTINGS.
- ★ SPECIAL ANTI-VIBRATION HANDLES, POSITIVE CONTROL WITH MINIMUM FATIGUE.
- ★ INSTANTANEOUSLY VARIABLE FREQUENCY TO SUIT ALL CONDITIONS.
- ★ ELECTRICALLY OPERATED TYPE ALSO AVAILABLE.

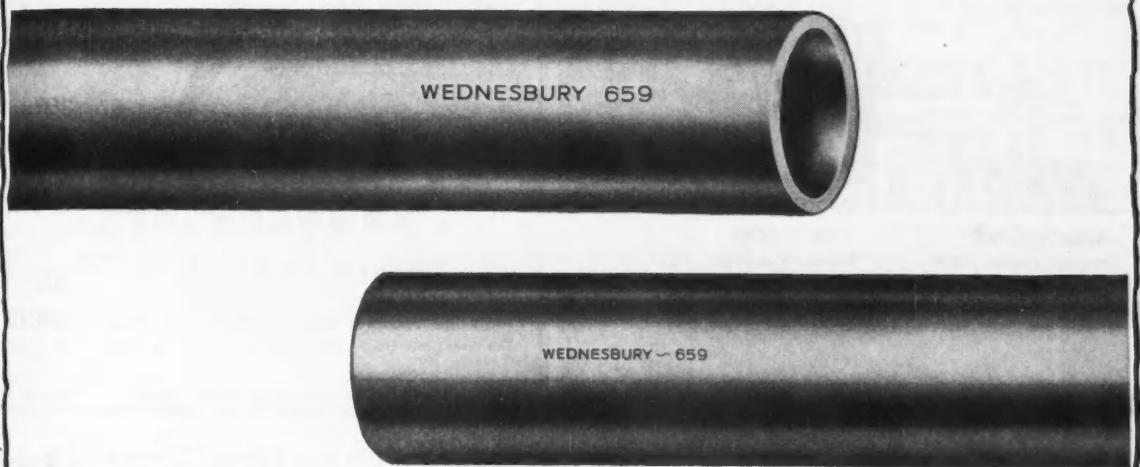
SAVE TIME, MONEY, AND MATERIALS BY USING VIBRATING TAMPERS.

E · P · ALLAM & CO. LTD.

132-135 SLOANE STREET, S.W.1. TELEPHONE: SLOANE 9976 (5 lines)
SCOTLAND: 39 CAVENDISH STREET, GLASGOW, C.S. TELEPHONE: SOUTH 0186

STRANGFORD, LTD., Belfast and Dublin.
A. GUNN AND CO., Altringham, Cheshire.
O. L. DAVIES, Port Talbot, Glam.
J. LEWIS (MACHINERY), LTD., Burslem,
Stoke-on-Trent.
CONCRETE ENGINEERING SERVICES, York
Road Industrial Estate, Wetherby, York.
JOHN ROULSTONE, LTD., Newcastle upon
Tyne.
W. R. SELWOOD, Chandler's Ford, Hants.

"WEDNESBURY" Copper Tube with a Marked Difference



The new smaller mark "WEDNESBURY" indicates a further development in quality. Extensive research has led to the use of new drawing media, purging and burnishing, making the marked sizes of "WEDNESBURY" copper tube to B.S. 659 virtually free from carbonaceous and oxide films.

All "WEDNESBURY" tube is solid drawn by the most efficient and modern processes, under strict laboratory supervision from raw material to finished tube, and backed by a prompt and efficient delivery service.

WEDNESBURY of course!

The WEDNESBURY TUBE COMPANY LIMITED
BILSTON STAFFORDSHIRE

Tel: BILSTON 41133 (9 lines).
Associated Company: Glynn Bros. Ltd., London and Manchester.
South Wales Warehouse: Penarth Road, Cardiff. (Tel: 22502.)

Manufacturers of LEAD SHEET & PIPE: PLASTIC TUBE & FITTINGS:
STEEL TUBES & FITTINGS: STEEL TUBE FABRICATIONS:
MALLEABLE TUBE FITTINGS.

let's get together

**you MAKE it
we INSTAL it**

Immense savings can be made by placing the entire responsibility of an installation project in the expert hands of **TARSLAG** Mobile Lifting Services who can supply specialists in every engineering field.

TARSLAG

Rotherham 78481 Stockton 65101
Wolverhampton 23881 Newcastle-on-Tyne 21377
Chesterfield 4908 London VIctoria 0407

Concrete Breaker POINTS



Available from Stock,
Concrete Breaker Steels
In 1½" or 1¾" Hexagon,
also Clay Chisels,
Asphalt Cutters and
Spades for all Breaker
Machines.

SEND FOR LIST 221059



Standall
ENGINEERING LTD.

MICKLEY WORKS, DRONFIELD WOODHOUSE, SHEFFIELD
Telephone: SHEFFIELD 72583 Telegrams: "UPSET," SHEFFIELD

PLANT HIRE

Available For Long or Short Term Hire

Cranes: Coles 5 ton and 22RB

Rollers: 2½ ton and 5 ton
Bromag Vibrating Roller

Bulldozers: Bristol 25, D4 with Scraper

Digger: Dinkum Major Digger

Loaders: Muir-Hill 2WL Loader with 1 cu. yd.
Bucket

Compressor: Consolidated 120 with 2 Tools,
"500" with 6 Tools

Pile Driver: Delmag D5

Road Surfacer: Barber-Greene

Pumps: 4" x 6"

Pneumatic Concrete Placer

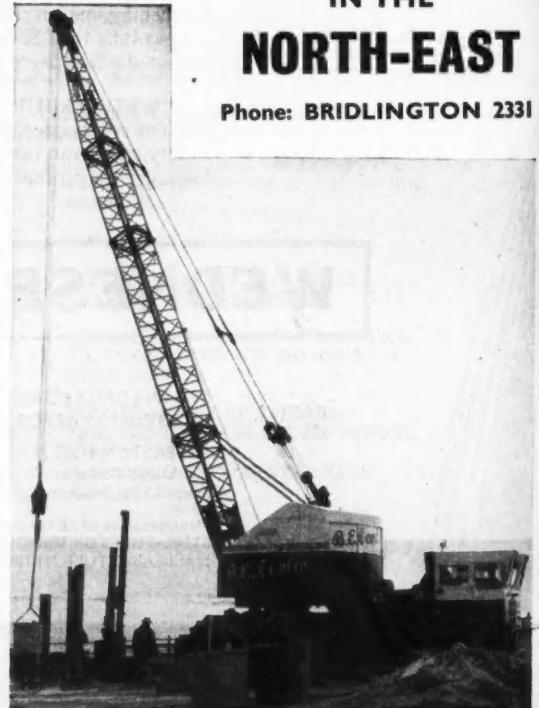
B. E. CONLIN

91a MARTON ROAD, BRIDLINGTON, YORKSHIRE

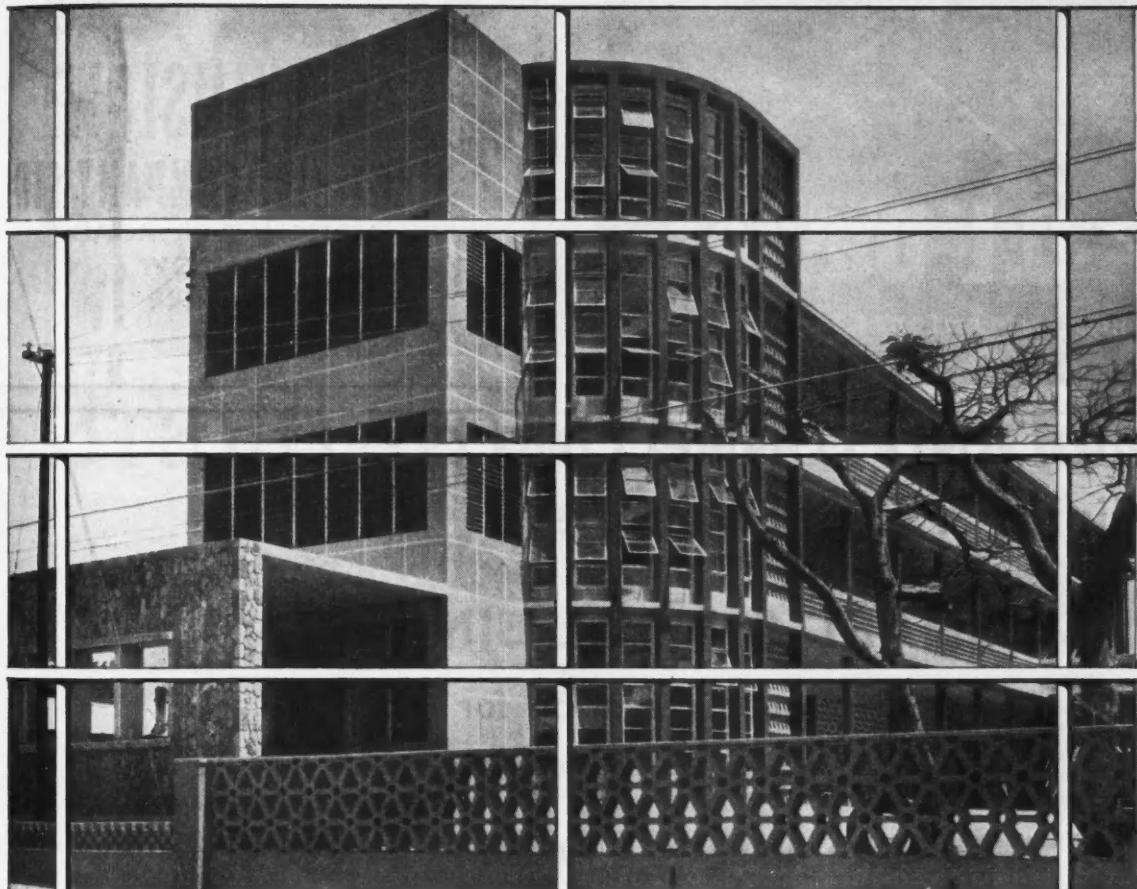
Serving CONTRACTORS and
MUNICIPAL AUTHORITIES

IN THE
NORTH-EAST

Phone: BRIDLINGTON 2331



MAXWELD DESIGN AND MAXWELD REINFORCEMENTS



Richard Hill Ltd. designed the reinforced concrete foundations, frame and floors of the Kingston Technical School, Jamaica, and supplied all the Maxweld reinforcement bars and fabric. For more information ring Middlesbrough (2206), London (Mayfair 3538), Birmingham (Mid. 5625), Manchester (Central 1652), Leeds (2-7540), Bristol (24977), Glasgow (Central 2179).

Architects : The Ministry of Education, Kingston, Jamaica.

RICHARD HILL LTD

(ESTABLISHED 1868)
REINFORCED CONCRETE ENGINEERS
MIDDLESBROUGH - YORKSHIRE
Telephone: MIDDLESBROUGH 2206



A MEMBER OF THE FIRTH CLEVELAND GROUP

CRC 28MR

SUPPLIERS THROUGHOUT SOUTH WALES & MON.
RADNORSHIRE & HEREFORDSHIRE FOR THE

WHITLOCK
DINKUM DIGGER
MAJOR

O.L.Davies
LIMITED
BAGLAN PLANT DEPOT • PORT TALBOT
GLAM. Tel: BRITON FERRY 3266 (2 lines)

- EXCAVATORS
- TRAXCAVATORS
- DOZERS & SCRAPERS
- COMPRESSORS
- DUMPERS
- CRANES

PLANT HIRE

WILMSLOW
PLANT HIRE COMPANY LTD.

MANCHESTER ROAD
WILMSLOW
CHESHIRE

TEL WILMSLOW 3421 & 3542

MIDLAND TUNNELLING CO., LTD.,
Mining & Civil Engineers

SHAFT & WELL SINKERS

Underground Excavation for

TUNNELS & SEWERS

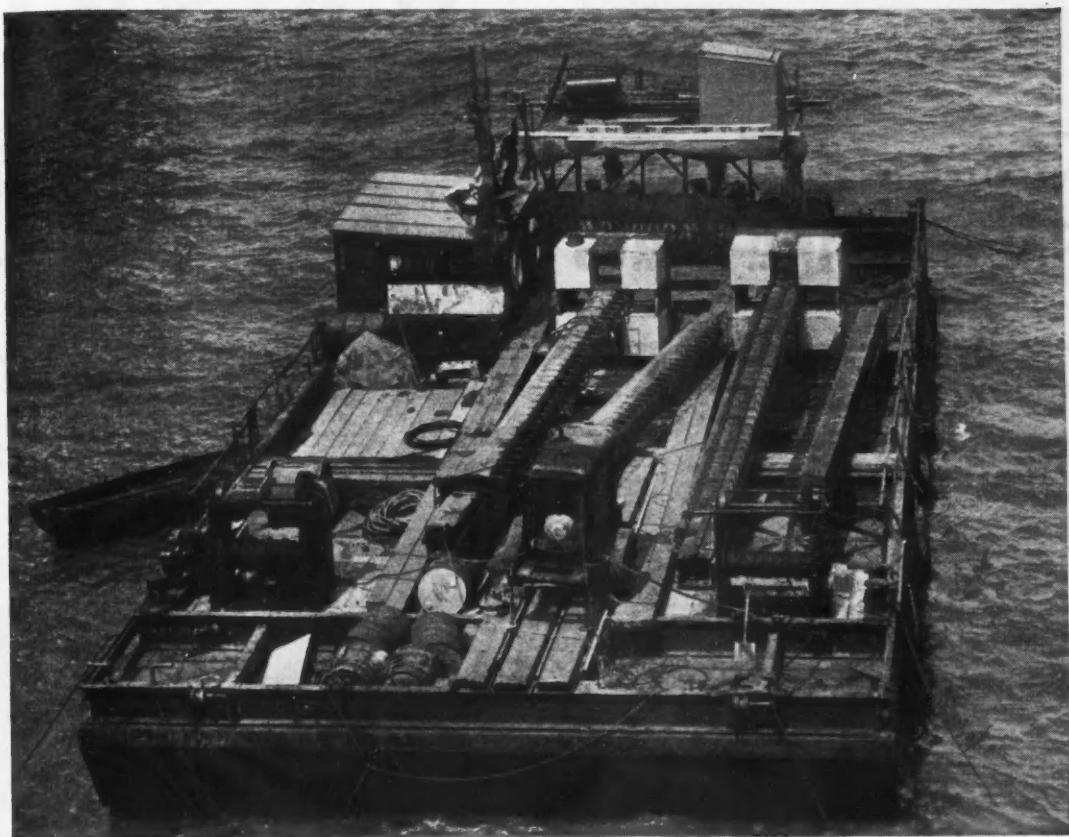
Concrete linings • Cement injection

Boreholes, Test Pits, etc.

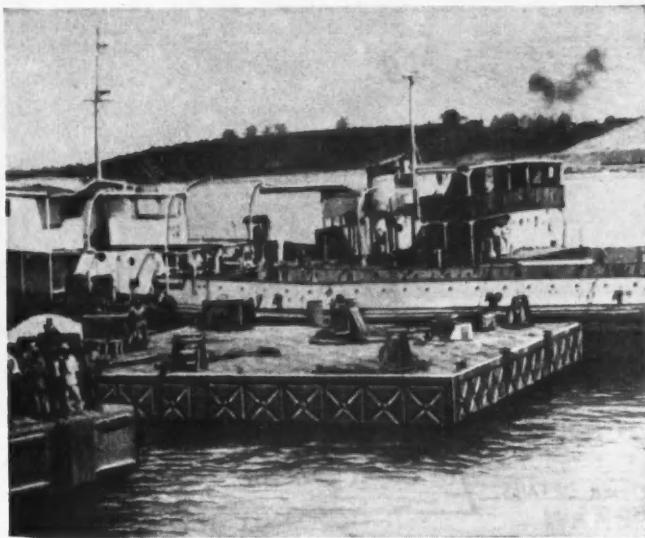
Demolition, etc.

Pneumatic Plant Hirers

MIDLAND TUNNELLING CO., LTD.,
20 Bentinck Road, Hyson Green, Nottingham
Telephone: Nottingham 75182/3



Braithwaite Pontoons



Braithwaite Pressed Steel Pontoons have been developed from the Braithwaite Pressed Steel Tank and successfully used for floating bridges, walkways and landing stages for both water-borne vessels and helicopters.

Power driven pontoons have been used with marked success for conveying vehicles and other dock cargoes in tidal and inland waterways. The pontoon shown in the upper illustration was supplied to the English Electric Babcock & Wilcox and Taylor Woodrow Atomic Power Construction Co. Ltd. for work at the new Power Station at Hinkley Point for the Central Electricity Generating Board.

The lower illustration shows a ship alongside a Braithwaite pontoon during the construction of the deep water wharves by Braithwaites, at Mombasa, Kenya.

BRAITHWAITE & CO. ENGINEERS LIMITED

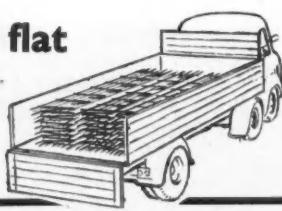
London Office: Dorland House, Regent Street, London SW1

Telephone: WHItehall 3993 · *Telegrams:* Bromkirk Phone London · Telex 23320

BRAITHWAITE & CO STRUCTURAL LIMITED · BRAITHWAITE FOUNDATIONS & CONSTRUCTION LIMITED



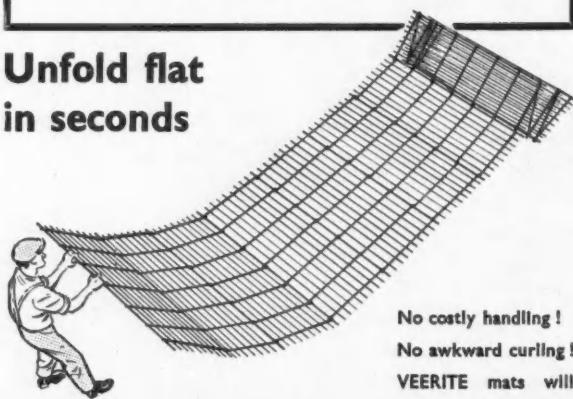
**Compact and flat
to transport**



**'VEERITE' HINGED AND FOLDED
Reinforcing Mats**

PROVISIONAL PATENT 34826/58

**Unfold flat
in seconds**



No costly handling!
No awkward curling!
VEERITE mats will
speed up your jobs
and save you money.
All sizes. Send us your
enquiry.

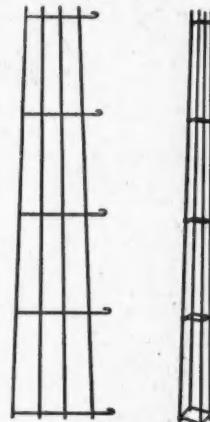
V. WRIGHT (LEEDS) LTD.
STILLHOUSE WIREWORKS,
WATERLOO ROAD, LEEDS, 10
Telephone: 76018/9

W R I G H T

RIGID WELDED MATS

Patent No. 15375/54

Increase concrete post
strength by 20%.
Supplied flat in any
length or section for easy
transport and storage.
Take only 20 SECONDS
to bend to shape. Used by
leading manufacturers.



"SNAPON" (REGD.)

Split Concrete Snap-on Bar
Spacers. Regd. Design. Patent
applied for. Immediate
delivery.



Used by the leading concrete
manufacturers throughout the country.

Send for full particulars and samples.

V. WRIGHT (LEEDS) LTD.,

STILLHOUSE WIREWORKS,
WATERLOO ROAD, LEEDS, 10
Telephone 76018/9

DORMAN
*Replacement
Exchange
Engines*

MINIMUM PLANT IMMOBILISATION

FITTED WITHIN 24 HOURS

FURTHER DETAILS

FULLY GUARANTEED

FROM



ALL THE SEPARATE
UNITS ARE ALSO AVAILABLE
UNDER OUR EXCHANGE SCHEME
BLOCKS, PUMPS, GOVERNORS, ETC

JOHN A. SPARKS & CO. LTD.

SOUTHERN & WESTERN CONCESSIONAIRES FOR DORMAN DIESEL ENGINES

STREATHAM HILL • LONDON • S.W.2 Tulse Hill 3434 (5 lines)

WESTERN DEPOT: 36 TUDOR ST., Phone: Cardiff 32342

DITCH WITCH

SELF-PROPELLED

TRENCHER

VISIT OUR STAND
OLYMPIA
14-19 NOV. 1960



PUBLIC WORKS
& MUNICIPAL
SERVICES
EXHIBITION

*The new low cost
machine that will
dig in any soil that
can be trenched
by any machine*

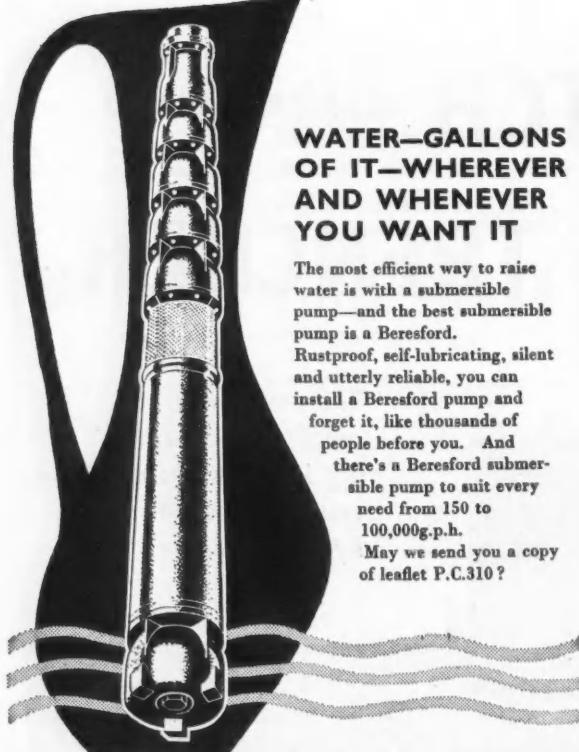


TRENCHES UP TO 600 FEET IN ONE HOUR

100' 200' 300' 400' 500' 600'

FOR ILLUSTRATED LITERATURE
OR DEMONSTRATION WRITE
SOLE SALES CONCESSIONAIRES—

WARSOP POWER TOOLS LTD
27 REGENT STREET, LONDON, S.W.1
REGENT 4632



**WATER—GALLONS
OF IT—WHEREVER
AND WHENEVER
YOU WANT IT**

The most efficient way to raise water is with a submersible pump—and the best submersible pump is a Beresford. Rustproof, self-lubricating, silent and utterly reliable, you can install a Beresford pump and forget it, like thousands of people before you. And there's a Beresford submersible pump to suit every need from 150 to 100,000g.p.h.

May we send you a copy of leaflet P.C.310?

BERESFORD | *submersible
pumps*

JAMES BERESFORD & SON LTD., ACE WORKS, KITTS GREEN, BIRMINGHAM 33
THE CORNERSHOT GROUP OF COMPANIES

Tel: STEchford 3081

BN250

VIBRATING ROLLERS

Complete range of
Stothert & Pitt machines
for hire or sale

*

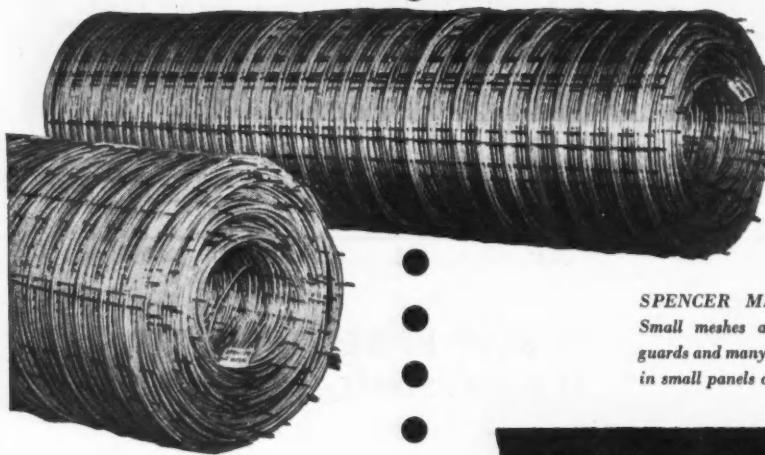
Enquiries to:—

METAL UNION (PLANT) LTD.
75 VICTORIA STREET,
LONDON, S.W.1

Telephone: Victoria 4868/9, 2177/8

SPENCER MESH

for
REINFORCING CONCRETE



An electrically welded mesh manufactured in accordance with B.S.S. 1221/1945 Part 'A' from High Tensile Steel Wire drawn in our own mill. Oblong or square meshes for concrete reinforcement in floors, foundations, roofs, roads, etc. Standard size sheets and rolls always in stock. We also specialise in designing reinforced concrete.

SPENCER MESH can also be supplied galvanized. Small meshes are ideal for partitions, fencing, screens, guards and many other applications. Available, if required, in small panels cut to your own specifications.

Write or telephone for further details

THE
SPENCER WIRE
COMPANY LIMITED • WAKEFIELD
Telephone • WAKEFIELD 6111 (10 lines) • Telegrams • SPENCER, WAKEFIELD, TELEX
Telex No. 55,160

DaW28760CJ



TWO PAINTS distinguished for long service **TO THE TRADE**

'Superlative' Gloss and 'Murisan' Latex Emulsion paints well deserve recognition for a lifetime of first class protection and decoration. Master Painters agree on their quality and recommend them for years of lasting service in a host of interior and exterior applications.

* New building materials create new problems for the Decorator; our Technical Advisory Service can often be of assistance in overcoming such problems as they arise.



BRITISH PAINTS LIMITED

PORTLAND ROAD, NEWCASTLE UPON TYNE, 2.

NORTHUMBERLAND HOUSE, 303-306 HIGH HOLBORN, LONDON, W.C.1.

31 WAPPING, LIVERPOOL.



Belfast, Birmingham, Bristol, Cardiff, Glasgow, Leeds, Manchester, Norwich, Plymouth, Sheffield, Southampton, Swansea and all principal towns.

'SUPERLATIVE' GLOSS PAINT

A 'bloom'-free, tough and durable coating specially recommended for both interior and exterior wood and metal surfaces. Available in 52 standard colours 'Superlative' dries in 8/10 hours to give a long lasting finish of exceptional beauty . . . and supreme water/weather resistance.

'MURISAN' LATEX EMULSION

Readily available in a wide range of colours—and Matt or Eggshell finishes—'Murisan' excels for quick painting on all interior surfaces. Easily applied with large wall brushes 'Murisan' can be second-coated in one hour . . . and gives an extremely smart (and washable) finish of remarkable durability . . . 'Murisan' conforms to the Factories Act requirements permitting 5 years' exemption from repainting.

Dependability in service



The task undertaken by this 19-RB diesel shovel is widening a mountain road in Norway; a high altitude job in tough and unusual conditions where dependability is of utmost importance.

comes from *quality* of engineering

A manipulator, shown on the right, is being used to weld caterpillar frames and axles so that welds are made in the down-hand or gravity position which is necessary to ensure their soundness.

Processes like this give Ruston-Bucyrus equipment its reputation for dependability in service.

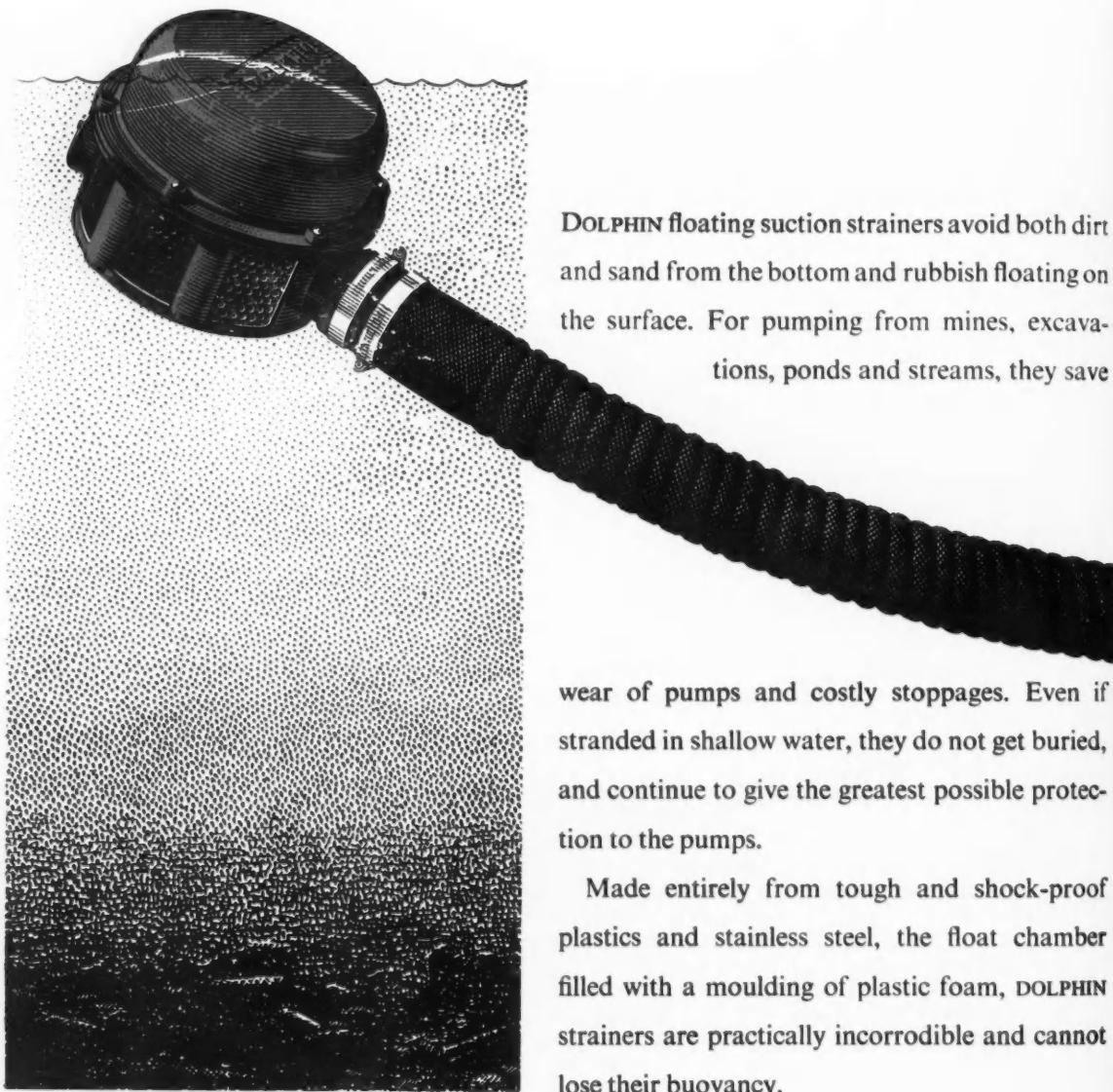


RUSTON-BUCYRUS

RUSTON-BUCYRUS LIMITED, EXCAVATOR SPECIALISTS, LINCOLN

Sales and Service Depots at Warrington and Taunton

PUMP USERS SAVE MONEY



DOLPHIN floating suction strainers avoid both dirt and sand from the bottom and rubbish floating on the surface. For pumping from mines, excavations, ponds and streams, they save

wear of pumps and costly stoppages. Even if stranded in shallow water, they do not get buried, and continue to give the greatest possible protection to the pumps.

Made entirely from tough and shock-proof plastics and stainless steel, the float chamber filled with a moulding of plastic foam, DOLPHIN strainers are practically incorrodible and cannot lose their buoyancy.

Please write for booklet which gives full details of DOLPHIN Floating Strainers.

DOLPHIN FLOATING STRAINERS

Save their cost many times over

MEGATOR PUMPS & COMPRESSORS LTD 43 BERKELEY SQUARE · LONDON W1 · Tel: GROsvenor 6946

TGA M114



HIRE

TRACTOR SHOVELS

1yd./1½yd. capacities—Standard "4 in 1" and Side Tipping Buckets.

Head Office and Works:

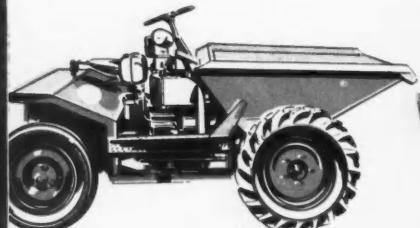
BELTON GRANTHAM Tel: Grantham 1221/3

Depots: BIRMINGHAM Tel: Shirley 3522
BRECON Tel: 330
CARDIFF Tel: 71354
CARDINGTON, BEDS. Tel: 206
DARLINGTON Tel: 3258
DEWSBURY, YORKS. Tel: Heckmondwike 1360
DISS, NORFOLK Tel: 2688
DORCHESTER Tel: 57
EDINBURGH Tel: Liberton 74507
GLASGOW Tel: Stepps 628
KINGSTON-ON-THAMES Tel: 7016
MANCHESTER Tel: Ramsbottom 3516
NEWTON ABBOT, DEVON Tel: 1181
SOUTHAMPTON Tel: Bishop's Waltham 137

EDDISON PLANT LTD

Thwaites

gives you ruggedness and
performance in narrow
loading height for greater
fined spaces



36 inch LOADING HEIGHT



BIG CAPACITY HEAVY DUTY SKIP



ONLY 49½ INCHES WIDE

£332.10 del.



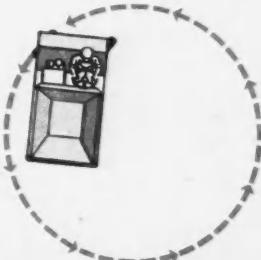
Thwaites 'SPRITE'

ES 'SPRITE'

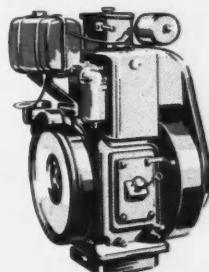
reliability of BIG dumper
form without increasing
manoeuvrability in con-



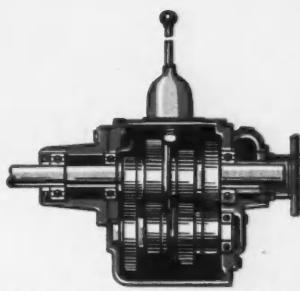
CAPACITIES: WATER LEVEL 13 cu ft
MAX. LOAD 15 cwt



UNDER 7' 9" TURNING RADIUS



5/6 H.P. DIESEL ENGINE



3-SPEED & REVERSE CONSTANT MESH GEAR BOX

E' the small dumper with the big capacity



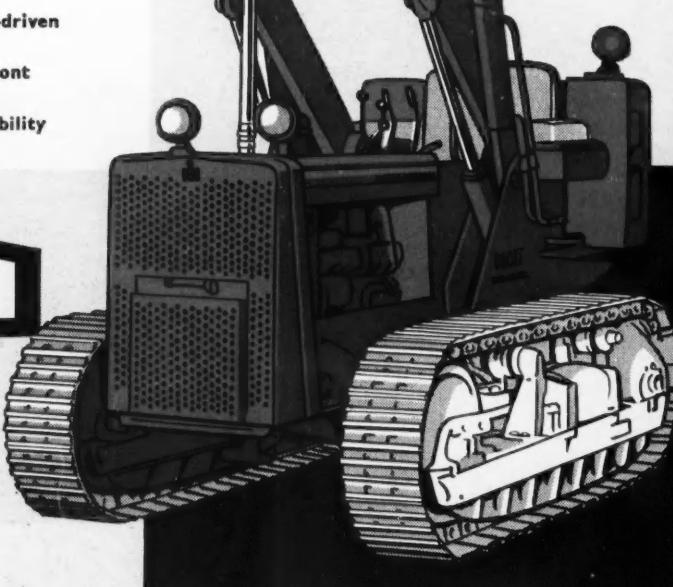
INTERNATIONAL
DROTT®

9K3

DROTT popularity proves DROTT superiority!

There is versatility unlimited in the exclusive Drott 4-in-1. It gives you not one machine for one job, but four machines in one—skid-shovel, bulldozer, scraper and clamshell. Drott popularity proves Drott superiority. Latest design features include:

- New 6-cylinder 71 h.p. diesel engine.
- New direct starting.
- New rotary-type fuel injection pump.
- New full-face sintered metal engine clutch-driven members.
- New vented track rollers, top idlers and front idler shafts.
- New increased track length for greater stability and flotation.



BOWEN

JAMES BOWEN AND SONS LTD.
EDINBURGH • GLASGOW • ABERDEEN

HEAD OFFICE:

45-59 Pitt Street, Edinburgh, 3.
Telephone: Waverley 4204

Glasgow branch:

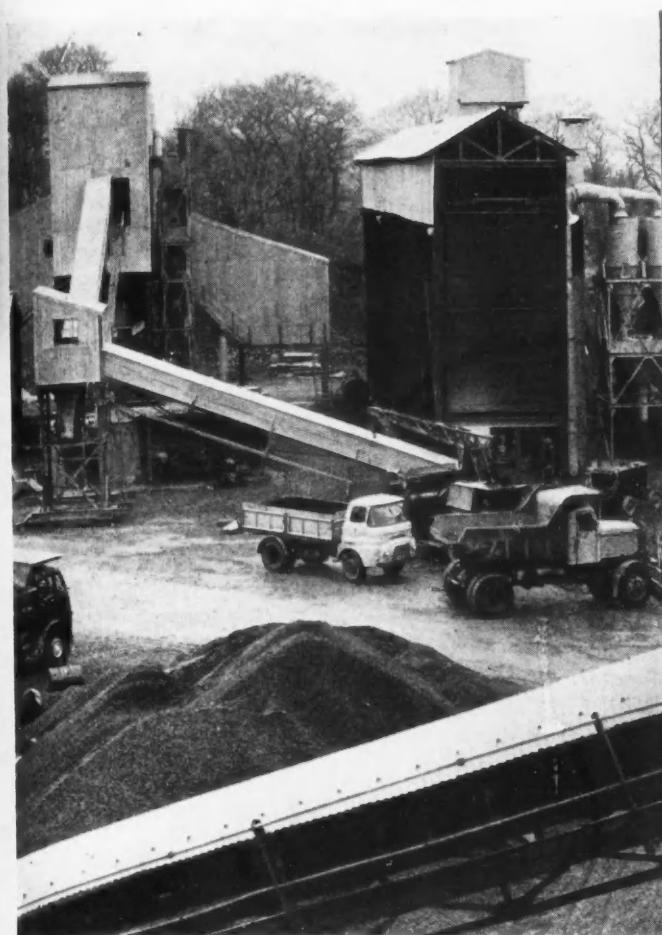
428 Helen Street, S.W.1. Telephone: GOvan 2611-2

Aberdeen branch:

Back Hilton Road. Telephone: Aberdeen 43332

SOLE SCOTTISH DEALERS FOR I.H. CONSTRUCTION EQUIPMENT

July 28 1960

**GOOD-WIN**

BIG CAPACITY Tarmacadam Plants

Outstanding Features include :-

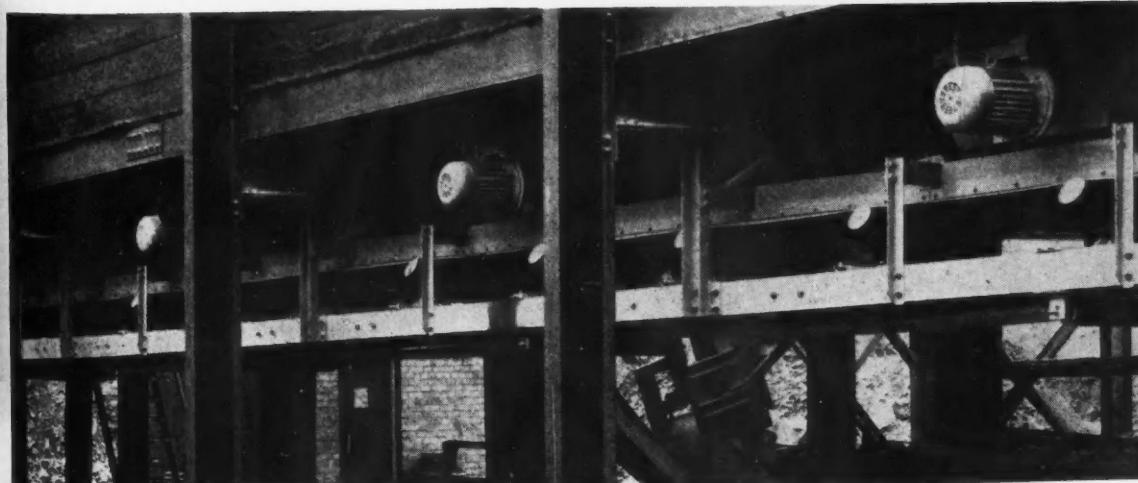
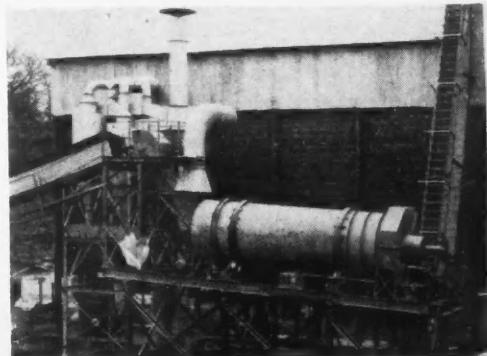
- Push-button selection from the Control House of any chosen specification.
- A series of Accra-Batch units fitted beneath storage bins give accurate batching of selected material.
- High efficiency Rotary Oil Fired Dryer fitted with Hauck Self-Proportioning Burner.
- Batch heater fitted with similar Burner.
- 4,000 lbs. Rota Mixer.



The recently installed plant of
Messrs. Dunning & Son Ltd.,
Haughmond Quarry, Nr. Shrewsbury.

GOODWIN BARSBY & CO. LTD.

LEICESTER · ENGLAND





ALLEN CRANES

—superb truck-mounts that can travel anywhere under their own power—are built with special heavy-duty chassis for long life. Finger-tip, air-controlled clutches; low overall height; short tail swing—these are some of the reasons operators prefer the ALLEN range.

The Model K. 52 illustrated is being used with a 45 ft. boom.



Send for full details from the manufacturers :

JOHN ALLEN & SONS
(OXFORD) LTD.
COWLEY, OXFORD
Tel : Oxford 77155/6/7

Power plus
Mobility plus
Extreme
Manoeuvrability

These are features that make the **ROADLESS 4 W.D. ANGLEDOZER** a most valuable machine for Builders, Civil Engineers, Earth Moving Contractors etc. Faster on the job . . . faster between jobs (*the drive to the front wheels can be disengaged and the machine driven on the public highway, saving the cost of a transporter*).

Brief Specification :

POWER UNIT: Fordson Power Major engine developing 51.8 b.h.p.

OVERALL DIMENSIONS: Length 14ft., width 7ft. 6in., height without cab 5ft. 6in., with cab 7ft. 9in.

WEIGHT: 4 tons 14cwt. 7lb.

BLADE: 7ft. 6in. wide x 28ins. deep with renewable cutting edge. Maximum lift 2ft. above tyre level. Maximum dig 6ins. below tyre level. Angle 25 degrees to either side.

STANDARD EQUIPMENT: Lights, front wheel weights, 9 x 24-4 ply front tyres, 11 x 36-6 ply rear tyres. Heavy duty clutch. Hand brake and engine hour meter.

ROADLESS TRACTION LTD

HOUNSLAW, MIDDLESEX

Telephone: HOUnglow 6421

No other wheeled tractor can match the **MANUEL-ROADLESS**

4 WD

for high work/cost ratio
manoeuvrability and speed
and rugged power



Need a
new broom?



After a while, even the finest equipment begins to show its age. When orders are coming in fast, and peak efficiency is vital—are you sure you're equipped to keep up with your competitors?

Perhaps UDT can help.

UDT helps you replace old equipment, add new, out of income. Which often means it pays for itself out of increased profits.

A nice business-like way to do business.

If you think UDT could help you, get in touch with the Manager of your nearest UDT office—the address is in your local directory.

**United Dominions Trust
(Commercial) Limited**

*United Dominions House
Eastcheap · London · EC3*

FOR IMMEDIATE HIRE

CRAWLER CRANES UP TO 50 TON CAPACITY

802 & 1201 LIMAS

43 RB's

38 RB's

33 RB's

22 RB's

19 RB's

10 RB's

Lorry mounted cranes

D4, D8 TRACTORS

EUCLID REAR DUMPS

GALION GRADERS

DERRICKS, 5, 7, 10, 20 ton

PILING EQUIPMENT

CRUSHING PLANT

NEALS CRANES 4/6 ton

933 & 955 SIDE TIP

977 & DROTT SHOVELS

CHASESIDE & MICHIGANS

DINKUM DIGGERS

3yd. DUMPERS

16/60 TRENCHERS

COMPRESSORS

Also all other Civil Engineering Plant available

ROADS AND RUNWAYS

(PLANT HIRE) LIMITED

26 VICTORIA ST. LONDON, S.W.1

TEL: ABBEY 4905

REVERSE TWICE AS FAST



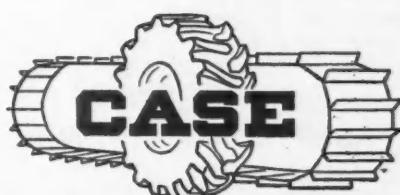
with **CASE** TERRAMATIC DRIVE

J. I. CASE COMPANY LTD

MILL ROAD, WEST DRAYTON, MIDDLESEX.

West Drayton 3221/3

Sole Distributors for Scotland:— Scottish Plant Sales
Ltd. Black St., Airdrie. Telephone: Airdrie 4143



FOR HIRE

PUMPCRET

CONCRETE PUMPS

Two Sizes	PC.3	PC.4
Capacities per hour approx. Range: Horizontal approx. or Vertical approx. Pipeline Available with	20-24 cub. yd. 1500 feet 135 feet 6" i.d. Electric Motor	8-10 cub. yd. 1250 feet 125 feet 4½" i.d. Electric Motor or Diesel Engine

PUMPCRET HIRE COMPANY LTD

4 Stafford Terrace, London, W.8

Telephone: WESTERN 3546

What is
97%
availability ?

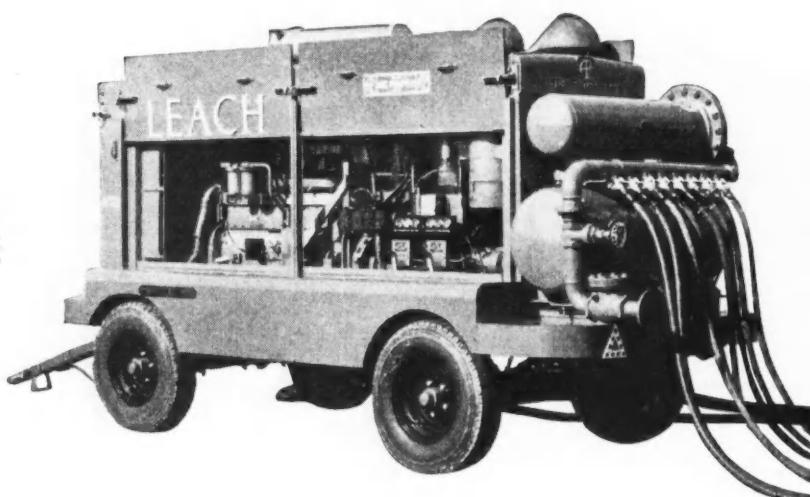
See the colour advertisement
on Cover vi, vii

HUBERT C. LEACH LTD.

"OFF THE SHELF" SERVICE FOR PNEUMATIC TOOLS AND EQUIPMENT

FOR
SALE

FOR
HIRE



AIR PUMPS COMPRESSORS FROM 70 TO 650 C.F.M.

ARMSTRONG-WHITWORTH PNEUMATIC TOOLS AND ACCESSORIES

WRITE FOR DETAILS: HUBERT C. LEACH LTD., HIGH STREET, CHESHUNT, HERTS. Tel.: WALTHAM CROSS 25161 (5 LINES)

CONTRACTORS' GUIDE TO AGGREGATES

BEDFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGilant 2530.) (For details, see Leics.)
DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
DARLEY SAND AND GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 3913/1.) All grades of washed sand and gravel, ready-mixed concrete. Pits: Mepel and Chippenham, Cambs.
DICKERSON, M. LTD., Newmarket Road, Cambridge. All grades washed sand and gravel, select stone, hoggins, breeze, clinker, "Terlite" crushed granite, foamed slag, concrete and brick, hardcore, ready-mixed concrete—all grades. (Tel.: Cambridge 56973/4.)
FREIGHTONHAM GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 3913/1.) Washed sand and gravel.
MACLAREN BROS. (KENNETT), LTD., gravel, tared and bituminous, gravel asphalt, washed sand and gravel, to B.S. Specifications. Delivered to site. Station Road, Merton, Surrey. (Tel.: Kentford 333/4.)
NORTH ROAD GRAVEL WORKS, LTD., The Brook, Sutton, Ely. (Tel.: Sutton 3913/1.) All grades washed sand and gravel, ready-mixed concrete and precast concrete pipes. Pit: Wimblington.
ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)
WEBB, G., LTD., 35 Magrath Avenue, Cambridge. (Tel.: 3969, 4353, 59966.) (See Cambs.)
WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Largest producers of all grades of washed aggregates for Bedfordshire and Northamptonshire. Regular deliveries anywhere.
WINFIELD, HENRY A., LTD., Pit Farm Lane, Hemel Hempstead, Herts. (Tel.: Berkhamsted 1208/9.) Pits at: Leighton Buzzard, Bedford. Building sands.

BERKSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.
BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGilant 2530.) (For details, see Leics.)
BULL SANDS AND GRAVELS, LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)
COFF, HARRY A., LTD., Buckhurst Hill, Chesham, Ascot, Berks. (Tel.: Ascot 1026/7.) Sand, all grades of washed aggregates, hardcore, clinker, ashes and hoggins.
CURTERSON AND SONS, LTD., Botley Works, Oxford. (Tel.: Oxford 41081/2/3.) Sand and all grades of washed aggregates. Pits at Radley, near Abingdon. (Tel.: Abingdon 441.)
DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
GRUNDON, S. (EWELEME), LTD., Ewelme, Oxon. (Tel.: Ewelme 20.) London Office (Tel.: Uxbridge 4156). All grades washed aggregates. Path hoggins, broken stone, building sand.
HANKEY, H. (WITNEY), LTD., Oxford Road, Witney. (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching and broken stone, Cotswold building and walling stone.
JAMES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand aggregates, hardcore, ash, building and bulk excavation. (Tel.: Slough 20361/2/3.)
LONDON BALLAST CO., LTD., (Tel.: Paddington 5064.) SSA Forchester Terrace, North Paddington, W.2.
POOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade. (Tel.: Lechlade 19.)
RALPH OF BATHSTONE, LTD., 17 Bathstone Lane, Bathstone, Hants. (Tel.: 355.) Concrete aggregates, building sand, path gravel, hoggins, etc.
WRAYSBURY SAND AND GRAVEL CO., LTD., Station Road, Theale, Reading. (Tel.: Theale 373.)

BRECKNOCKSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)
SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington. (Tel.: 961.) Salop.

BUCKINGHAMSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.
ASPHALTIC CARPETS, LTD., 38 Buckingham Palace Road, London, S.W.1. (Tel.: Territorial 4857 or Gerrards Cross 349.) Manufacturers of all grades of gravel, bitumen, macadam, gravel asphalt and cold asphalt at Gerrards Cross.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGilant 2530.) (For details, see Leics.)

BICESTER STONE CO., LTD., Bicester, Oxon. Manufacturers and suppliers of all grades limestone, macadam, dry, pitching stone, hardcore, etc.

COFF, HARRY A., LTD., Buckhurst Hill, Chesham, Ascot, Berks. (Tel.: Ascot 1026/7.) Sand, all grades of washed aggregates, hardcore, clinker, ashes and hoggins.

DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

DRINKWATER, W. W. (WILLESDEN), LTD., Rush Green, Denham, Bucks. (Tel.: Denham 2241/2/3.) GRUNDFIELD, S. (EWELEME), LTD., Ewelme, Oxon. (Tel.: Ewelme 4156.) All grades washed aggregates. Path hoggins, broken stone, building sand.

HALL AND CO., LTD., Brentford, Middlesex. (Tel.: Isleworth 4455,) and Coronation Road, High Wycombe. (Tel.: 4360/1) and at Gerrards Cross.

JAMES AND CO., LTD., 20, Buckingham Avenue, Slough. Sand aggregates, hardcore, ash, building and bulk excavation. (Tel.: Slough 20361/2/3.)

LONDON BALLAST CO., LTD., (Tel.: Paddington 5064.) SSA Forchester Terrace, North Paddington, W.2.

MARLOW SAND AND GRAVEL CO., LTD., Westmoorings Pit, Little Marlow, Bucks. (Tel.: Marlow 379.)

STUART MACEY, LTD., Gordon Road, High Wycombe. (Tel.: High Wycombe 2591/2.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

CAMBRIDGESHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGilant 2530.) (For details, see Leics.)

CAMBRIDGESHIRE

DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
DARLEY SAND AND GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 3913/1.) All grades of washed sand and gravel, ready-mixed concrete. Pits: Mepel and Chippenham, Cambs.
DICKERSON, M. LTD., Newmarket Road, Cambridge. All grades washed sand and gravel, reject stone, hoggins, clinker, ashes, brick, rubble, pitching, hardcore, and granite chippings. All to B.S. Specifications. Delivered to any site in East Anglia.
FREIGHTONHAM GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)
WEBB, G., LTD., Cambridge. 35 Magrath Avenue, Cambridge. (Tel.: 4353, 59966.) Supplier at known sites, of "First Quality Only" all grades washed sand and gravel, reject stone, hoggins, clinker, ashes, brick, rubble, pitching, hardcore, and granite chippings. All to B.S. Specifications. Delivered to any site in East Anglia.
WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

CARDIGANSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)
SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington. (Tel.: 961.) Salop.

CHESHIRE

BUCKTON QUARRY, broken stone, all grades. (Tel.: Mossley 1231.) Or with Mill Road, Oldham.
CASTLETON SAND AND GRAVEL QUARRIES, LTD., Pennant End Quarry, Whalley Bridge. (Tel.: Whalley Bridge 139.) Washed sand and gravel.
CAWOOD, LTD., Pitstall, Cheshire. (Tel.: Pitstall 7219.) Llanarmon Quarry, Llanarmon, near Mold. (Tel.: Llanarmon-yn-ys-yl 27.) Crushed limestone and tarred macadam, all grades.
CHESHIRE AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-ys-yl 33.) Hard, broken limestone, dry and coated, to B.S.S. Inquiries to registered offices—Market Chambers, Tower Square, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent 88094.)
CROSSHILL GRAVEL, LTD., Cheddle, Stoke-on-Trent. Staffs. (Tel.: Tean 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.
DUNNING AND SON, LTD., (See Shropshire.)
HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (Tel.: Shrewsbury for details.)
HINTON GRAVEL, LTD., 10, Strand, Liverpool Road, Manchester. (Tel.: Deansgate 5453 and 5456.) Quarries at Cheddle, Staffs. (Tel.: Tean 241.) And at Longton, Stoke-on-Trent. (Tel.: Longton 32196.)
HULLAND GRAVEL CO., LTD., Cheddle, Stoke-on-Trent. (Tel.: Cheddle 223/4/5/19 at 2195.) Manchester Office: 464 Wilbraham Road, Chorlton, Manchester, 21. (Tel.: Chorlton 2274/5.)
PENMAENMAWR AND WELSH GRANITE CO., LTD., 72 Picton Road, Liverpool, 15. (Tel.: Sefton Park 7211.) All sizes and gradings of crushed granite aggregate from our Collingwood Dock (Liverpool) Depot. One quantity per day; immediate delivery ex stock.
PRESTWICH, WILLIAM, AND SONS, LTD., Dronfield, Derbyshire. (Tel.: 2204-6 lines.) Dry and coated Durbar, limestone, slate, all purpose, to all specifications. "Haddon" foamed slag blocks.
HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (Tel.: Shrewsbury for details.)
TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Shropshire for details.)
TRENT HILL GRAVEL CO., LTD., Loxdale, Quavers, Willoughbridge, near Market Drayton. Salop. (Tel.: Pipe Gate 304/5.) All sizes crushed or natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity: 2,000 tons per day.
WILLIAMS, G. F., LTD., Bishop Street San Quarry, Turncroft Lane, Stockport. (Tel.: Stockport 7096.) Building sand and concrete sand. Bulk sand and gravel filling a speciality.

CORNWALL

PENTEWAN DOCK AND CONCRETE CO., LTD., Pentewan Works, near St. Austell. (Tel.: Marazion 1016.) Gwintill Works, near Helston. Pure silica gravel and grit, concreting, building, plastering and asphaltating sands, diwan and granite aggregates, all sizes.

CUMBERLAND

BROOMBYS, LTD., Sandside, Milnthorpe. (Tel. 3251/2.) Westmorland. (See Westmorland.)
ESK MANUFACTURING CO., LTD., Dalton Road, Garthwaite, 10. (Tel.: Dalton 1992.) All grades washed, crushed gravel and concreting sand to B.S. Specification. Precast concrete products and partition blocks. Sand lime coloured facing and common bricks. Ex works or delivered.

DENBIGHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington. (Tel.: 961.) Salop.

DERBYSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S. 802 and 1621 and wet-mix; large output; reliable deliveries.
BURROWS BROTHERS (EXCAVATIONS), LTD., Walsley, near 108, Sowerby, Chadderton. (Tel.: Chadderton 7130.) Raw shale, black shales, graded clinker, filter media, stone, slag, sand, gravel and hoggins filling. Bulk quantity supplies. **GRAVEL HILL SAND QUARRIES, LTD.**, Abdy (Leics.) 79. (See Leicestershire for details.)
HILTON GRAVEL LTD., Hilton, Derbyshire. (Tel.: Etwall 422.) Also at Mercaston. (Tel.: Brailsford 316.) And at Willington. (Tel.: Repton 3215.)

DERBYSHIRE

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3115 lines.)
HULLAND GRAVEL CO., LTD., Cheadle, Stoke-on-Trent. (Tel.: Cheadle 2323/4, 2119 and 2195.) Manchester Office: 464 Wilbraham Road, Chorlton, Manchester, 21. (Tel.: Chorlton 2274/5.)
PRESTWICH, WILLIAM, AND SONS, LTD., Dronfield, Derbyshire. (Tel.: 2204-6 lines.) Dry and coated Derbyshire limestone and slag for all purposes and to all specifications. "Haddon" foamed slag blocks.
SALISBURY AND WOOD, LTD., Matlock. (Tel.: 272-273.) Limestone and granite, dry or coated gravel and sand, kerbs, slate blocks, paving stones, structured and natural stone; lime and ground limestone. Lightweight aggregates, ashes, red shale.

DORSET

BULL BROS. S. AND L. LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)
DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
DORSET BUILDING STONES, LTD., Portland, Dorset. (Tel.: Portland 2207/8.) Tarred and bituminous macadam, foundation materials, limestone for all purposes and to all gradings. Portland stone aggregates and Portland capstone aggregates for reconstructed stone. By road and sea.
GILSTON, S. AND A. SONS, LTD., Holme, near Bath. (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., 8 Commercial Road, Parkstone (Tel.: 5379.)
MOREL (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, hoggins, path gravel.

DURHAM

BRAITHWAITE, A., AND CO., LTD., Knaresborough, Yorks. Quarry at Catterick. (Tel.: Old Catt. 157.) (For details see Yorkshire.)

ESSEX

ALRESFORD SAND AND BALLAST CO., LTD., Alresford Creek, near Colchester, Essex. (Tel.: Wivenhoe 341.) Pits at Alresford Creek, Brightlingsea, Stoke-by-Nayland, Bures and Holland. All grades of washed shingle, concreting sand and building sand. Road and water transport.
BANKS, F. AND ED. LTD., 73 High Street, Rayleigh, Essex. (Tel.: Rayleigh 1031/2.) Pits at Great Totham, Heybridge and West Tilbury. All grades of washed material supplied and delivered; also hardcore, ashes and bricks.
BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGilant 2530.) (For details, see Leics.)
BENT-MARSHALL (LEYTON), LTD., 665-667 High Road, Leyton, E.10. (Tel.: Leytonstone 4047/8.) Sand, ballast, brick and concrete hardcore delivered all round.
DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
FERDIS PITS, LTD., The Limes Garage, Fenceline Road, Barkingside. (See London: 521/2-3001/2.) Pits at Orsett, Stanford Hough, and Upminster. All grades of washed aggregates, plastering and building sands supplied and delivered, also hardcore and ashes.
HALL AND CO., LTD., Manor Road, Romford. (Tel.: Romford 423/4.) Pits at Romford, Boreham and Linton, near Grays. Gravel, aggregates, concreting, plastering and building sand.
HUNNABLE, F. A., AND SON, LTD., Rayne Road, Braintree, Essex. (Tel.: Braintree 151 and 1351.) Graded washed stone, "slin" to rejects; washed concreting sand and washed drift building sand. Classified as ash for asphalt. Pits at Braintree, Bocking, Beasley End, Hedingham and Alphamstone.
LEIGH BUILDING SUPPLY CO., LTD., Head Office: 956 London Road, Leigh-on-Sea, Essex. (Tel.: 8262-8263.) All grades of washed materials, building sand, hardcore, bricks, granite.
PETERS AND BARHAM, LTD., 309 South Street, Romford. (Tel.: Romford 44141-7 lines.) Washed and crushed gravel, all sizes; sand. Pits at Ashdown, Chignall, St. James, Dagenham, Great Waltham, North Ockenden, Boxley, and Thurrock.
READ, P. LTD., Hallnault 6111/2/3.) High-grade sands, ballast and shingles supplied and delivered; also ready-made concrete.
ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)
STANWAY CONTRACTS, LTD., Upper Edwards Hall, Eawood, Southend-on-Sea. (Tel.: Eastwood 55161.) Sand and gravel pits at Rochford and Woodham Walter. Graded aggregates supplied and delivered.
WELLDOWN GRANITES, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Washed and graded aggregates. Local Office and pits: Tillingham 287.
WIVENHOE SAND, STONE AND GRAVEL CO., LTD., Wivenhoe, near Colchester, Essex. (Tel.: Wivenhoe 231.) High-quality washed aggregates of all grades.

Gloucestershire

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.
BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)
COKE, T. (CHELTENHAM), LTD., 267 Gloucester Road, Cheltenham. (Tel.: Cheltenham 4744/484.) Sand, gravel, gravel aggregates, hardcore, limestone, chippings, tar paving, bituminous macadam and concrete blocks, fence posts, etc., etc.
CROMHALL QUARRIES, LTD., Cromhall, Wotton-under-Edge, Glos. (Tel.: Failand 3467/7.) Concrete aggregate—gravel. In large quantities. Tar-macadam, tar-paving, bituminous macadam and cold asphalt to B.S.S. for hand or machine laying.
FLOYD AGAR AND CO., LTD., Sherston, Malmesbury, Wilts. (Tel.: Sherston 237.) Cotswold building stone, hardcore, etc. (Details under Wilts.)
GRINSTEAD, S. AND SONS, CHURCHSTON, Gloucester. (Tel.: Churchdown 3135 and 2216.) Stone, quarry and dredger owners. All grades and types aggregate materials.

Rates for insertion in this GUIDE will be forwarded on application

CONTRACTORS'

GUIDE TO AGGREGATES

GLOUCESTERSHIRE

HALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol, 3. (Tel.: 63001.) Gravel aggregates, concreting, plastering and building sand.
POOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)
TAYMAC, LTD., Wootton Bassett, Wiltshire. (Tel.: Wootton Bassett 591—10 lines.) (See Wiltshire.)
WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Glos. (Tel.: Coleford 3158/9.) Tared and bituminous limestone macadams, asphalt, concrete aggregates, dolomitic media, engineering, facing and common bricks for all purposes. Delivery road or rail.

HAMPSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Newbury. (Tel.: Theale 358.) Dorking, Oxon. (Tel.: Chilham 236.) Billingsgate, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.s.
BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGLANT 2530.) (For details, see Leics.)
BULL BROS. S. AND L. LTD., 256A High Street, Winchester. (Tel.: 2264.) Concreting aggregates (reconstituted, pit-mixed, weighbatched to meet any specification); also ballast, hoggin, path gravel and sand from own pits at Fawley, Lockerley, Ringwood, Romsey, Southampton.
DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Holcombe-on-the-Pass 227.)
HALL AND CO., LTD., Baltic Wharf, Marine Parade, Southampton (Tel.: Southampton 21234), and at Portsmouth. Pits at Ringwood, Highbridge and Tottern. Gravel aggregate, concreting, plastering and building sand.
HASKINS, G. AND SONS, QUEEN STREET, Emsworth. For washed sands and graded aggregates, path and road gravels, hoggin, clinker, ashes. (Tel.: Emsworth 2271.)
MORRISON (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, hoggin, path gravel.
NEW MILTON SAND AND BALLAST CO., LYMPINGTON ROAD, NEW MILTON, HANTS. (Tel.: 37 and 566.) Guaranteed uncrushed, washed, screened and graded concrete aggregates. All sizes. Washed sand and fine sand.
PETERSFIELD ENGINEERING AND CONCRETE PRODUCTS, BURTON, nr. Petersfield, Hants. (Tel.: Petersfield 1079.) Concrete aggregates, washed and graded filter media, etc.
PRYETT, G. AND SONS, LTD., Drayton Lane, Portsmouth. (Tel.: Cosham 70059.) Concrete aggregates, building sand, hoggin, ashes, washed and graded filter media, etc.
RALPH O. BADINGTON LTD., 37 Kempsford Lane, Basingstoke, Hants. (Tel.: 65.) Concrete aggregates, building sand, path gravel, hoggin, etc.
WESSEX SAND AND GRAVEL CO., LTD., 126 Hillside Avenue, Southampton. (Tel.: 56616.) Pits at Romsey and Fair Oak. Concrete aggregates, hoggin, building sand, etc.
WRAYSBURY SAND AND GRAVEL CO., LTD., Station Road, Theale, Reading, Berks. (Tel.: Theale 373.)

HEREFORDSHIRE

BENGY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 3014.) Suppliers of all grades of crushed concrete aggregates, road metal, pitching stone, hardcore and coated macadam.
HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Prestegate, Radnor. (Tel.: Prestegate 352.) All grades of tared and bituminous macadam, roadstone, chippings and concrete aggregates, etc.
OLD RAILWAY TRADING CO., LTD., Kington. (Tel.: 2101.) Granite and limestone aggregates, coated macadam, concrete products.
SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel.: 961). Salop.
WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Glos. (Tel.: 3158/9.) (See Gloucestershire.)

HERTFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGLANT 2530.) (For details, see Leics.)
DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
GABELL, J. LTD., 100 High Street, Enfield, Middx. (Tel.: HOWARD 4351/2.) Washed aggregates and building sand. Pits at Hertford and Enfield.
HALL AND CO., LTD., Railway Yard, Orchard Road, Stevenage (Tel.: 775), and at Hatfield. Gravel aggregate, concreting, plastering and building sand.
ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)
WEBB, G. CAMBRIDGE LTD., 35 Magrath Avenue, Cambridge. (Tel.: 3969 4353, 59966.) (See Cambs.)
WINFIELD HERBY LTD., Pit Lane, Herby, Hempstead, Herts. (Tel.: Berkhamsted 1208/9.) Pits at Hemel Hempstead, Watford, West Hyde, Rickmansworth. Concrete aggregates, hoggin, building sand.

HUNTINGDONSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGLANT 2530.) (For details, see Leics.)
FERRERSAND AGGREGATES, LTD., Northampton Road Quarries, Rushden (2354/5). (See Northants.)
GRAVEL PRODUCTS (HUNTS), LTD., St. Neots, Hunts. (Tel.: St. Neots 123.) Pits at Little Paxton, St. Neots. (Tel.: St. Neots 308.) Deliveries in Beds, Hunts, and South Cambs.
NENE BARGE AND LIGHTER CO., LTD., Market Chambers, Peterborough (Tel.: 5534/5), and Ship End Quarries, Wansford, near Peterborough (Tel.: Wansford 384/5). Roadstone, hardcore, broken stone, lime, sand, ballast, shingle, etc.
ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) Producers of all grades of washed sand and gravel. Ready mixed concrete. Precast concrete and dry stonework.
WEBB, G. CAMBRIDGE LTD., 35 Magrath Avenue, Cambridge. (Tel.: 3969 4353, 59966.) (See Cambs.)
WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

KENT

BRASSTED SAND PITS, Brassteds, Kent. (Tel.: 586.) London office: 10A Ellery Street, S.E.15. (Tel.: New Cross 3337.) Soft and plastering sands, lime and sand-mix, dry, hardcore, S.H. bricks, ashes, etc.
BROWN BROS. (SITTINGBOURNE), LTD., Chalkwell Road, Sittingbourne, Kent. (Tel.: Sittingbourne 330.) Sand, ballast, shingle, hardcore, clinker, breeze blocks, etc.

CLUBBS, J., LTD., Dartford, Kent. (Tel.: Dartford 25431.) Pits in North Kent, Medway area and Sevenoaks district. All washed and crushed gravel aggregates, concreting and building sand.

DIAMOND TREAD CO. (1938), LTD., Ditton Court Quarry, Maidstone, near Maidstone. (Tel.: West Malling 221.) Quarry owners, tarmacading, bituminous macadam, stone manufacturers and suppliers. Head Office: 21-22 Old Bailey, London, E.C.4. (Tel.: City 7001—10 lines.)

DIAMOND TREAD CO. (CHART), LTD., Swan Lane Quarries, Little Chart, Ashford, Kent. Quarry owners: tarmacading, bituminous macadam and dry roadstone supplies. All inquiries to Area Office: Ditton Court, Quay Lane, Larkfield, near Maidstone, Kent. (Tel.: W. Malling 3444.)

HALL AND CO., LTD., Canning Street, Maidstone. (Tel.: Maidstone 51051); and at Folkestone and Hayes. Pits at Lansford, near Larkfield. Gravel aggregates, concreting, plastering and building sand. Surecrete precision-mixed concrete.

HARRIS, M. P. AND CO., LTD., Station Road, Paignton, Devon. (Tel.: 385.) (See Devon.)

TILERBY CONTRACTING AND DREDGING CO., LTD., Postle, Maidstone. (Tel.: Maidstone 55401/2/3.) Suppliers of tared, bituminous and dry Kentish ragstone, sea walling, asphalt fillers, Scotch granite and kerbing.

LANCASHIRE

BROOMBY'S, LTD., Sandside, Minthorpe (Tel.: 3251/2.) Westmorland. (See Westmorland.)

BUCKTON QUARRY. Broken stone, all grades. (Tel.: Mossley 123.) Or write Main Road, Oldham.

CASTLETON SAND AND GRAVEL QUARRIES, LTD., Trow Lane, Castleton, nr. Rochedale. (Tel.: Castleton 57100.) Lee Quarries, Bacup. (Tel.: Bacup 287.) Washed pit sand, crushed washed stone aggregates; pitching stone.

CROFT GRANITE BRICK AND CONCRETE CO., LTD., West Bank, Widnes. (Tel.: 2656.) "Kubitzed" granite aggregate to B.S.s, tared and bituminous macadam, cold asphalt; "Croftmatic" Wet Mix, filter media, concrete products.

CROFTON GRAVEL LTD., Chaddesley, Stoke-on-Trent. Staffs. (Tel.: Team 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

DUNNING AND SON, LTD., (See Shropshire.)

HILTON GRAVEL LTD., Rice Street, Liverpool Road, Manchester, 3. (Tel.: Densgate 5455 and 5456.) Queen's Head, Stanley, Lancs. (Tel.: 2411.) And at Longton, Stoke-on-Trent. (Tel.: Longton 2136.)

HULLAND GRAVEL CO., LTD., Chaddesley, Stoke-on-Trent. (Tel.: Chaddesley 2323/4, 2119 and 2195.) Manchester Office: 464 Willbraham Road, Chorlton, Manchester, 21. (Tel.: Chorlton 2274/5.)

PENMAENMAWR AND WELSH GRANITE CO., LTD., all sizes and gradings of crushed granite aggregate. Immediate delivery in stock. Liverpool and Preston Depots:

Office: 7 Picton Road, Liverpool, 15. (Tel.: Sefton Park 7261.) Manchester Depot:

Office: Cornbrook Road, Manchester, 15. (Tel.: Trafford Park 3630.)

ROUND-O QUARRIES, LTD., Helsby Street, Warrington. (Tel.: 3545—4 lines.) Building and concrete sand and shale.

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffs. for details.)

TRENTHAM GRAVEL CO., LTD., Lordships Quarries, Willoughbridge, near Market Drayton, Salop. (Tel.: Pipe Gate 304/5.) All sizes crushed or natural, washed gravel. Twice-washed sharp concreting and plastering sand. Plant capacity: 2,000 tons per day.

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Local Offices and pits: Chorley 3923 and Wigton 82039.

WITHERS LIMESTONE LTD., Black Lane Quarry, Carnforth. (Tel.: Carnforth 327.) Graded limestone aggregate to B.S.s, all sizes. Immediate delivery ex stock.

X.L. GRANITE (INGLETON), LTD., Head Offices: Clapham, Lancashire. (Tel.: Clapham 318/9.) Works Tel.: Ingleton 231. All sizes and gradings of Ingleton granite aggregate.

LEICESTERSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGLANT 2530.) Best Leicestershire grey granite, dry and coated gradings to any specification, cold asphalt and wet mix. Prompt rail/road delivery.

CLIFFORD GRANITE CO., LTD., Markfield, near Leicester. (Tel.: Markfield 361.) Granite aggregate to B.S.s. All sizes. Tared and bituminous granite, concrete slabs and kerbs. Transmix-concrete.

CROFT GRANITE, BRICK AND CONCRETE CO., LTD., Croft, near Leicester. (Tel.: Narborough 2261—4 lines.) "Kubitzed" granite aggregate to B.S.s, tared and bituminous macadam, cold asphalt, "Croftmatic" Wet Mix, filter media, concrete products.

DUSTON STONE QUARRIES, LTD., New Duston, Northampton. (Tel.: Brixworth 278 and 298; Duston 505.) (See Northamptonshire.)

ENDERBY AND STONEY STANTON GRANITE CO., LTD., 21 New Walk, Leicester. (Tel.: 56682.) Quarries at Enderby. London Offices: 29 Dorset Square, N.W.1. (Tel.: Amb. 1141.)

GRANGE HILL SAND QUARRIES, LTD., Prior Park, Ashby-de-la-Zouch. (Tel.: Ashby 79.) Works: Hartsorne, Derby. Yellow screened plastering and building sand, all to B.S.s.

HILTON GRAVEL LTD., Hemington Fields, near Shardlow, Derby. (Tel.: Shardlow 266.)

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

LEICESTERSHIRE

MOUNTSORREL GRANITE CO., LTD., 21 New Walk, Leicester (Tel.: 56682.) Quarries at Mountsorrel, near Loughborough. 1in. pink granite a speciality. London Office: 29 Dorset Sq., N.W.1. (Amb. 1141.)

WANLIPI GRAVELS, LTD., Wanlip Road, Syston, Leicester. Any size or grading, scientifically balanced ballast. All to B.S.s. (Tel.: Syston 2327 and 2797.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Northamptonshire.)

WREAK VALLEY GRAVELS CO., LTD., Melton Mowbray. (Tel.: Rits-Rotherby 205 or head office Melton 2488.) All grades washed aggregates and sand.

LINCOLNSHIRE

CONINGSBY SUPPLY CO., LTD., Registered Office: The Broadway, Woodhall Spa, Lincoln. (Tel.: Woodhall 2189.) All sizes and types of sand, gravel, pumice, filling, flint, hoggin, Ex quarries or delivered.

DOW-MAC (PRODUCTS), LTD., Tallington, Stamford. All grades of washed sand and gravel. (Tel.: Market Deeping 2301.)

EAST MIDLANDS BUILDERS' SUPPLY CO., LTD., 21 Castle Dyke West, Barton-on-Humber, Lincs. (Tel.: 2189.) All grades washed sand and gravel, roadstone, hardcore, washed silica sand.

HARTSHOLME STONE AND SAND CO., LTD., Hartsholme Wood, Doddington Road, Lincoln. Sole selling agents: Hartsholme Sales, Ltd. (Tel.: Lincoln 23391.)

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

HURSTWATER, J. V., LTD., Victoria Street, Grimsby. (Tel.: Grimsby 3657) and Castle Street, Caistor, Lincs. (Tel.: Grimsby 3657) and Castle Street, Caistor, Lincs. (Tel.: Grimsby 3657)

POLLARD, C. AND SON (TALLINGTON), LTD., White House, Langton, Peterborough. (Tel.: Tallington 2140.) All grades washed sand and aggregates. For "Supercrete" ready-mixed concrete, "phone Market Deeping 3132."

TRENTFORD GRAVELS, LTD., Head Office: Deansgrove Grimsby. (Tel.: Grimsby 5354.) Washed and graded gravel and sand, roadstone, hardcore, slag, tarmac, ashes, etc. Pits and quarries throughout the county.

LONDON

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGLANT 2530.) (For details, see Leics.)

COX, H. AND SONS, LTD., 13, Cobden Street, W.C.1. (Tel.: Rodney 2215—3 lines.)

CROFT GRANITE BRICK AND CONCRETE CO., LTD., 128-136 High Street, Edgware, Middlesex. (Tel.: Edgware 00767/7 and 1246.) "Kubitzed" granite aggregate to B.S.s, tarred and bituminous macadam, cold asphalt. "Cromatite" Wet Mix, filter media, concrete products.

DANFORTH, F. AND CO., LTD., 261A Finchley Road, N.W.3. (Tel.: HAMstead 8044-8.) Granite limestone or slag, coated or dry, all sizes and pitching, granite kerb and sets, felspar quartz and other minerals by road or rail, or ex London stock.

DORSET LIMESTONES, LTD., Bumpers Lane, Easton, Portland, Dorset. (Tel.: Portland 2207/8.) (For details, see Dorset.)

DRINKWATER, W. (WILLESDEN), LTD., Dudden Hill Lane, Willesden, N.W.10. (Tel.: GLADstone 6400/5.) Pits: Rush Green, Denham, Bucks. (Tel.: Denham 2241/2/3.) Also Staines Road, Hounslow Heath, Middlesex. (Tel.: Hounslow 6222/3.)

GABRIEL, C., LTD., Palmers Lane, Enfield, Middlesex. (Tel.: Howard 4351/2/3.) Washed aggregates and building sand. Pits at Enfield and Hertford.

HALL AND CO., LTD., Chantrey House, Eccleston Street, S.W.1. (Tel.: Sloane 7122.) and at East Dulwich, Poplar and Wandsworth. Gravel aggregates, concreting, plastering and building sand.

KEEN, W. J. AND SONS, LTD., 10 Granville Road, Epping, Essex. (Tel.: Epping 2520.) All sands, ballast, shingle and hardcore supplied.

LONDON BALLAST CO., LTD., (Tel.: Paddington 5084/55.) Porchester Terrace, North, Paddington, W.2.

READ, P. T., LTD., Gales Gardens, Bethnal Green, E.2. (Tel.: Shorelatch 9128/9.) All sizes supplied and delivered; also ready-mixed concrete. Pits: Fairlop Airfield, Forest Road, Ilford, Essex. (Tel.: Halnau 6111/2/3.)

ROADS RECONSTRUCTION (1934), LTD., Stockley Lane, West Drayton, Middlesex. (Tel.: West Drayton 3041.) All sizes broken limestone, dry and coated to British Standards.

MERIONETHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington, 2. (Tel.: 961), Salop.

MIDDLESEX

CROSS, GEO. C. AND CO., LTD., Uxbridge Road, Southall. (Tel.: Southall 2264/5/6.) Concrete aggregates, hardcore, excavations, demolitions.

DRINKWATER, W. W. (WILLESDEN), LTD., Staines Rd., Hounslow Ht., Middx. (Hounslow 6222/3.)

GABRIEL, C., LTD., Palmers Lane, Enfield, Middlesex. (Tel.: Howard 4351/2/3.) Washed aggregates and building sand. Pits at Enfield and Hertford.

GRUNDON, S. 79, Harlington Road, Hillingdon, Middlesex. (Tel.: Uxbridge 4158.) Sand, ballast, shingle, hardcore, ashes, excavation and demolition.

HALL AND CO., LTD., Chantrey House, Eccleston Street, S.W.1. (Tel.: Sloane 7122.) and at Ashton and Brentford. Pit at Bedfont, near Feltham. Gravel aggregates, concreting, plastering and building sand.

LONDON BALLAST CO., LTD., (Tel.: Paddington 5044/55.) Porchester Terrace, North, Paddington, W.2.

READ, P. T., LTD., Gales Gardens, Bethnal Green, E.2. (Tel.: Shorelatch 9128/9.) All sizes, ballast, shingles supplied and delivered; also ready-mixed concrete. Pits: Edmonton Gravel Pit, Montague Road, N.9. (Tel.: Shorelatch 9128/9; and Fairlop Airfield, Forest Road, Ilford (Tel.: Halnau 6111/2/3).

CONTRACTORS' GUIDE TO AGGREGATES

MIDDLESEX

STUART MACEY, LTD., Gordon Road, High Wycombe. (Tel.: High Wycombe 2591/2.)
THAMES SAND AND GRAVEL CO., LTD., Fordbridge Road, Northerton. (Tel.: Walton-on-Thames 23616.) Gravel aggregates, concreting, plastering and building sand.
WRAESBURY SAND AND GRAVEL CO., LTD., Pits at Wraesbury. (Tel.: Wraesbury 164.) Gravel aggregates, concreting, plastering and building sand.

MID-WALES

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)
HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)
OLD RADNOR TRADING CO., LTD., Quarries in Radnorshire. (Kingston 11.) (See Herefordshire.)
SALOP SAND AND GRAVEL SUPPLY CO., LTD., Wellington. (Tel.: Salop 961.)
TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffs. for details.)

MONMOUTHSHIRE

IN-SITU CONCRETE, LTD., Victoria Works, Ebbw Vale (Tel. 3032), and Phoenix Works, Cardiff (Cardiff 63311), for limestone and slag aggregates, ready-mixed concrete, tarmacadam, media, filling, etc., kerbs and pavings.
MONMOUTHSHIRE ASSOCIATED QUARRIES, LTD., Bryncoed, Monmouth. (Tel.: Newport 5311/2.) Suppliers of all grades of concrete aggregates, road metal, pitching stone, tarmacadam and bituminous macadam in limestone, dolomite and blue pennant stone. Quarries throughout the county.
WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Glos. (Tel.: 3158/9.) (See Gloucestershire.)

MONTGOMERYSHIRE

HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)
SALOP SAND AND GRAVEL SUPPLY CO., LTD., Wellington. (Tel.: Salop 961.)

NORFOLK

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGILANT 2530.) (For details, see Leics.)
FRECKENHAM GRAVEL CO., LTD., The Brook, Sutton, Ely, Cambs. (Tel.: Sutton 391/3.) Washed sand and gravel. (Tel.: Feltwell.)
JOHNSON, P. C. H., LTD., Station Road, Terrington St. Clement, near King's Lynn. (Tel.: Terrington St. Clement 248.) Washed and screened gravel, roadstone, washed sharp and fine sands.
NETTERTON STONE QUARRIES, LTD., Pix Farm Lane, Hemel Hempstead, Herts. (Tel.: Berkhamsted 1208/9.) Pits & Netterton. Concrete aggregates, building sand.
HORPE GRAVEL PITS, LTD., Harvey Lane, Norwich. (Tel.: Norwich 332434.) Washed and graded aggregates, stone and gravel delivered to all parts of Norfolk and Suffolk.

NORTHAMPTONSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxford. (Tel.: Coghenhoe 236.) Billing, Northampton. (Tel.: Coghenhoe 464) for washed and graded aggregates to B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGILANT 2530.) (For details, see Leics.)

BICESTER STONE CO., LTD., Stratton Audley, Bicester, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers of all grades limestone tarmacadam, dry, pitching stone, hardcore, etc.

BILLING GRAVEL CO., LTD., Station Road, Billing, Northampton. (Tel.: Coghenhoe 219.) London Office: 23 Berkeley Square, W.1. (Tel.: Mayfair 6341.)

BRAYBROOK, E. W., LTD., Newton Road, Higham Ferrers, Northants. (Tel.: Rushden 3344 and 3345.) All grades of washed and graded aggregates to B.S.S. building sand, hardcore, etc.

BOW-MAC (PRODUCTS), LTD., Tallington, Stamford. All grades of washed sand and gravel. (Tel.: Market Deeping 2301.)

DUSTON STONE QUARRIES, LTD., New Duxton, Northampton. (Tel.: Brixworth 278 and 298; Duxton 505.) Producers of building and walling stone, roadstone, hardcore, broken stone, ashes, sand, gravel and hoggin. Immediate delivery throughout Northamptonshire.

FERD'S AGGREGATES, LTD., Northampton. Rock Quarries, Rushden, Northants. (Tel.: Rushden 2354/5.) Largest producer in the county of all grades of high-quality concrete aggregate to B.S.S. Deliveries throughout Northamptonshire and adjoining counties.

HOVERINGHAM GRAVEL CO., Hoveringham, Nottinghamshire. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, near Stamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay.

MACKNESS, A. J., LTD., Ransome Road, Northampton. (Tel.: Northampton 589.) Producers of all grades of washed aggregates. Building sand, Mixmortar (lime/sand mortar). Prompt deliveries.

HINE BARGE AND LIGHTER CO., LTD., Market Chambers, Peterborough (Tel.: 5534/5), and Ship End Quarries, Wanstead, near Peterborough (Tel.: Wanstead 384/5). Roadstone, hardcore, broken stone, ballast, ashes, silica clay and sand.

NEWARK (PETERBOROUGH) SAND AND GRAVEL CO., LTD., 127 Market Field Road, Peterborough. (Tel.: Peterborough 2091.) All grades washed and screened gravel and sand.

PETERBOROUGH QUARRIES, LTD., Sandy Lane, Peterborough. (Tel.: Market Deeping 2355.) Eight quarries supplying all grades of hardcore and broken stone. Also Wetmix at Yarwell, Wanstead. All grades gravel and sand at Maxey.

NORTHAMPTONSHIRE

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Market Deeping 2140.) (See Lincolnshire for details.)
STORTON, F. E., LTD., Weedon Road, Northampton. (Tel.: Northampton 3358.) Producers of washed gravel and sand to B.S.S.

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 587/8/9.) Largest producers of all grades of washed aggregates in Northamptonshire and Bedfordshire. Regular deliveries anywhere. Local office and pits: Forty Ford. (Tel.: Welford 256.)

NORTH WALES

CAWOOD, WHARTON AND CO., LTD., Pistyll Gwyn Quarry, Llanarmon, near Mold. (Tel.: Llanarmon-llyn 14/2.) Crushed limestone and tarred macadam, all grades.

CHESHIRE AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-Yr-Yale 43.) Hard, broken limestone; dry and coated to B.S.S. Inquiries to Registered Office—Market Chambers, Tower Square, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent 8894.)

ENSTON BROS., Llwyn Ifan Quarry, Clynnon Fawr, Caerwern. (Tel.: Clynnon Fawr 297/8.) All sizes crushed, washed natural sand and gravel. Highest quality. Precast concrete products, ex our Griffiths Crossing Factory, Caerwern. (Tel.: Caerwern 835/6.) Washed and graded granites, ex our quarry Penmachno and Gwydyr Quarries Ltd., Treffriw, Llanwrin, Denbighshire. (Llanwrin 38.)

PENMAENMAWR AND WELSH GRANITE CO., LTD., Quarries at Penmaenmawr (Tel.: 2256/8), and at Trevor (Tel.: Clynnon 223.) Caernarvonshire. All sizes and gradings of crushed granite aggregate. Any quantity per day immediate delivery ex stock. Coated granite also available.

RUTHIN AND DENBIGH TARMACADAM CO., LTD., Denbigh. (Tel.: Denbigh 75.) Lime, limestone, carbonate of lime, tarmacadam, etc. Also inquiries to Lunt Bros., Ltd., 23 Colmore Row, Birmingham. (Tel.: Central 7408—4 lines), and Lunt Bros., Ltd., Stourbridge (Tel.: 5201—6 lines).

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffs. for details.)

NOTTINGHAMSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGILANT 2530.) (For details, see Leics.)

GLEN QUARRIES, LTD., Central Chambers, Willgate, Rotherham. (Tel.: Rotherham 5226.) Crushed and graded stone, concreting sand, building sand, plastering sand and crushed gravel; could be collected ex quarry or delivered.

GUNTHORPE GRAVELS (1958), LTD., (Tel.: Nottingham 77357.) and Works: Lowdham 2131.) (An associate company of Bardon Hill Quarries Ltd.) All grades washed gravel and sand to B.S.S.

HOVERINGHAM GRAVEL CO., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) Quarries at Hoveringham, Holme, Pierrepont Colwick, Bleasby and Newark. All grades washed gravel and sand to any specification. Crushed quartzite for surface dressing of roads a specialty. Plant capacity 8,000 tons per day.

NEWARK GRAVEL AND CONCRETE CO., LTD., Grove Street, New Baldwin, Newark, Notts. (Tel.: Newark 401.) All grades washed sand and aggregates.

NOTTS. NOTTS. GRAVEL CO., LTD., Belvoir, Retford, Notts. (See Yorkshire.)

PRESTWICH, WILLIAM, AND SONS, LTD., Dronfield, Derbyshire. (Tel.: 2204—6 lines.) Dry and coated Derbyshire limestone and slag for all purposes and to all specifications. "Haddon" foamed slag blocks.

SALISBURY AND WOOD, LTD., Matlock. (Tel.: 272/273.) (For details, see Derbyshire.)

OXFORDSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxford. (Tel.: Coghenhoe 236.) Billing, Northampton. (Tel.: Coghenhoe 464) for washed and graded aggregates to B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGILANT 2530.) (For details, see Leics.)

BICESTER STONE CO., LTD., Stratton Audley, Bicester, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers of all grades limestone tarmacadam, dry, pitching stone, hardcore, etc.

CURTIS, J. AND SONS, LTD., Botley Works, Oxford. (Tel.: Oxford 41081/2/3.) Sand and all grades of very fine aggregates at Radley, near Abingdon. (Tel.: Abingdon 441.)

DANGERFIELD, F. J., AND CO., LTD., 216A Finchley Road, London, N.W.3. (Tel.: HAMPSTEAD 8044/8.) For all road aggregates, kerbs, sets. (See London.)

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

HALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol, 3. (Tel.: 63001.) Gravel aggregates, concreting, plastering and building sand.

ROAD RECONSTRUCTION (1954), LTD., Stoneleigh House, Frome. (Tel.: Frome 2361.) All sizes broken limestone, dry and coated, to British Standards. Precast concrete products.

WAINWRIGHT, JOHN, AND CO., LTD., Shepton Mallet. (Tel.: Shepton Mallet 2366/7.) All sizes basalt, coated basalt, concrete aggregates, filtering media, building blocks and slabs.

RADNORSHIRE

OLD RADNOR TRADING CO., LTD., Quarries in Radnorshire. (Tel.: Kington 211.) (See Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington (Tel.: 961), Salop.

RUTLAND

HOVERINGHAM GRAVEL CO., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, near Stamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay. Quarries at Ketton.

PETERBOROUGH QUARRIES, LTD., Sandylands, Maxey, Peterborough. (Tel.: Market Deeping 2355.) Quarry at Greetham, all grades of broken stone and hardcore. (See also Northamptonshire.)

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Market Deeping 2140.) (See Lincolnshire for details.)

SCOTLAND

KEIR AND CAWDER, LTD., Kirkintilloch Road, Bishopbriggs. (Tel.: Bishopbriggs 3200.) All grades washed sand and gravel aggregates.

SHROPSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S., all sizes, coated limestone to B.S. 802 and 1621 and wet mix; large output; reliable deliveries.

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

DUNNING AND SON, LTD., Hampsford Quarry, near Shrewsbury. (Tel.: Bayston Hill 351.) High quality roadstone, chippings, concrete aggregates, hardcore and coarse material. Large tonnages always avail.

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Kingston. (Tel.: 11.) (See Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington (Tel.: 961), Salop.

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffordshire for details.)

TRENTHAM GRAVEL CO., LTD., Lordsley Quarries, Willoughbybridge, near Market Drayton, Salop. (Tel.: 2104/5.) All sizes crushed stone or natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity: 2,000 tons per day.

SOMERSET

ASHAM QUARRY CO., LTD., Chantry, Frome. (Tel.: Nunney 351.) All sizes limestone block, broken and aggregates. Tarred and bituminous macadam to B.S. Ex quarry and delivered.

DANGERFIELD, F. J., AND CO., LTD., 216A Finchley Road, London, N.W.3. (Tel.: HAMPSTEAD 8044/8.) For all road aggregates, kerbs, sets. (See London.)

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

HALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol, 3. (Tel.: 63001.) Gravel aggregates, concreting, plastering and building sand.

ROAD RECONSTRUCTION (1954), LTD., Stoneleigh House, Frome. (Tel.: Frome 2361.) All sizes broken limestone, dry and coated, to British Standards. Precast concrete products.

WAINWRIGHT, JOHN, AND CO., LTD., Shepton Mallet. (Tel.: Shepton Mallet 2366/7.) All sizes basalt, coated basalt, concrete aggregates, filtering media, building blocks and slabs.

SOUTH SCOTLAND

ESK MANUFACTURING CO., LTD., Carlisle. (Tel.: Carlisle 2-4941.) (For details see Cumberland.)

SOUTH WALES

IN-SITU CONCRETE, LTD., Victoria Works, Ebbw Vale (Tel. 3032), and Phoenix Works, Cardiff (Cardiff 63311), for limestone and slag aggregates, ready-mixed concrete, tarmacadam, media, filling, etc., kerbs and pavings.

PENMABLISS AND WELSH GRANITE CO., LTD., 18 Quay Street, Cardiff. (Tel.: 20645/7.) All sizes and gradings of crushed granite aggregate from our Cardiff and Swansea Dock Depots. Dolomite aggregates from Ewenny Quarry, Bridgend. (Tel.: 1086/7.) Coated stone also available.

SESSIONS AND SONS, LTD., West Dock, Cardiff. Producers of coarse fine aggregate, dredged sand and gravel to British Standards. Bracknell, Marlow and Swanscombe. (Also Gloucester and Hereford.)

SOUTH WALES SAND AND GRAVEL CO., LTD., Head Office: P.O. Box 8, Beaumont Buildings, Swansea. (Tel.: Swansea 53071.) Sand and gravel merchants, builders' merchants, Pennant Quarry owners: slag, hardcore, ashes, filling, graded clinker filter media. Depots: Cardiff, Newport, Barry, Port Talbot, Briton Ferry, Swansea, Llanelli.

STAFFORDSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S., all sizes, coated limestone to B.S. 802 and 1621 and wet mix; large output; reliable deliveries.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: VIGILANT 2530.) (For details, see Leics.)

CROXTEN GRAVEL CO., LTD., Cheepley, Stoke-on-Trent, Staffs. (Tel.: Tean 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

CONTRACTORS' GUIDE TO AGGREGATES

STAFFORDSHIRE

DUNNING AND SON, LTD., Wood End Gravel Pits, Hedgesford. (Tel.: Hedgesford 302/325.) Washed sand and gravel. All to B.S.S. High-quality roadstone, concrete aggregates and coated macadam from our Haughmond Quarry, near Shrewsbury. (See Shropshire.)

GRANITE HILL SAND QUARRIES, LTD., Tel.: Ashby (Leics. 79). (See Leicestershire for details.)

HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

HILTON GRAVEL, LTD., Cheadle, Staffs. (Tel.: Tean 241.) Also at Longton, Stoke-on-Trent (Tel.: Longton 32196) and Stretton, Burton-on-Trent (Tel.: Burton 6061).

HULLAND GRAVEL CO., LTD., Cheadle, Stoke-on-Trent. (Tel.: Cheadle 2323/4, 2119 and 2195.) Manchester Office: 464 Wilbraham Road, Chorlton, Manchester. (Tel.: Chorlton 2214/5.)

PRESTWICH, WILLIAM, AND SONS, LTD., Dronfield, Derbyshire. (Tel.: 2204/6 lines.) Dry and coated Derbyshire limestone and slag for all purposes and to all specifications. "Haddon" foamed slag blocks.

RUGELEY GRAVEL CO., LTD., Rugeley Quarries, Rugeley, Staffs. (Tel.: Rugeley 251/2.) Entirely modern plant. Sand classifiers. Finest aggregates to B.S. Large output.

SALSBURY AND WOOD, LTD., Matlock. (Tel. 272/273.) (For details, see Derbyshire.)

SHIRE OAK GRAVELS, LTD., Lichfield Road, Walsall Wood, Staffs. Washed crushed gravel and washed sand. (Tel.: Brownhills 3252.)

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) Pl. sand, concrete sand, and all grades of washed crushed gravel. Hardcore, chippings, sand and gravel.

TRENTHAM GRAVEL CO., LTD., Lordship Quarries, Willoughbridge, near Market Drayton, Salop. (Tel.: Pipe Gate 304/5.) All sizes crushed or natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity 2,000 tons per day.

WINDMILL SAND AND GRAVEL QUARRIES, LTD., Cannock Road, Wolverhampton. (Tel. 31108.) Concrete aggregates, plastering, building and asphalt sand. All to B.S.S.

SUFFOLK

ALRESFORD SAND AND BALLAST CO., LTD., Alresford Creek, near Chichester, Essex. (Tel.: Wiverton 3/4.) Suffolk area pits at Bures and Stoke-by-Nayland. All grades washed aggregate sand, also hoggin.

BARDON HILL QUARRIES (ELLIS AND EVERARD, LTD.), near Leicester. (Tel.: Coalville 1226/7/8; or London: V/Giant 2530.) (For details, see Leics.)

DARBY'S SAND AND GRAVEL CO., LTD., Pit at Chippenham, Cambs. (See Cambs.)

DICKERSON, M., LTD., Teversham Corner, Newmarket Road, Cambridge. (Tel. 56973/4.) (See Cambs.)

FRECKENHAM GRAVEL CO., LTD., Pit at Freckenham, Cambs. (See Cambs.)

HALL AND CO., LTD., West End Road, Ipswich. (Tel.: Ipswich 55593/4.) Pits at Keggrave and Homersfield, near Harleston. Gravel aggregates, concreting, plastering and building sand.

MACLAREN BROS. (KENNETT), LTD., Station Road, Kennett, Cambs. (Kentford 333/4.) (See Cambs.)

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

THORPE GRAVEL PITS, LTD., Harvey Lane, Norwich. (Tel.: Norwich 33243/4.) (See Norfolk.)

WEBB, G., CAMBRIDGE, 35 Magrath Avenue, Cambridge. (Tel. 3969, 4353, 59966.) (See Cambs.)

SURREY

COFF, HARRY A., LTD., Buckhurst Hill, Cheapside, Ascot, Berks. (Tel. 1026/7.) (See Berks.)

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8048/8.) For all road aggregates, kerbs, sets. (See London.)

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

HALL AND CO., LTD., Victoria Wharf, Croydon. (Tel.: Croydon 4444.) Other main depots at Coulsdon, Epsom, Mitcham, Oxsted, Purley, Redhill, Tadworth and Woking. Pits at Send and Reigate. Gravel aggregates, concreting, plastering and building sand. Surecrete precision-mixed concrete.

HARRIS, M. P., AND CO., LTD., Kingston Road, Leatherhead, Surrey. (Tel. 3497.) (See Sussex.)

SURREY

JANES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand, aggregates, hardcore, ash, ballast, bulking & bulk excavation. (Tel.: Slough 20361/2/3.)

LONDON BALLAST CO., LTD., Tel.: Paddington 5064.) SSA Porchester Terrace North, Paddington, W.2.

MARCO (AGGREGATES), LTD., Pit: Norlands Lane, Thorpe, near Egham. (Tel.: Chertsey 3401.) Producers and distributors of high-grade washed sand, shingle, ballast, etc.

MARCO (CROYDON), LTD., Hampton Road, West Croydon. (Tel.: Thornton Heath 4236/7/8.) All building and road aggregates.

WELLS, A. L., AND SON, LTD., Builders' Merchants, Garlands Road, Leatherhead. (Tel. 3018/9.) Sand aggregates, hardcore, ashes, cement. Clinker block manufacturers.

WINTON, WM. R., LTD., Send, Woking. (Tel.: Ripley 2454/5.) All grades sand, shingle, ballast, hoggin and ashes. Clinker block manufacturers.

SUSSEX

AVANN, F., Cavendish Avenue, Eastbourne. (Tel. 4969/70.) Washed and graded ballast, sand, bricks, breeze and concrete blocks, hardcore, clinker, tarmac, etc., supplied.

GILSON, S. C., AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

HALL AND CO., LTD., 16 Chapel Road, Worthing. (Tel.: Worthing 7840.) Other main depots at Bexhill, Bognor, Crowborough, East Grinstead, Eastbourne, Hastings, Horsham, Littlehampton and Washington, Crumbley, near Eastbourne, Chichester, Rye Harbour, Midhurst, Shoreham and Portslade. Gravel aggregates, concreting, plastering and building sand. Surecrete precision-mixed concrete.

HARRIS, M. P., AND CO., LTD., West Station Goods Yard, Bexhill (Tel. 61): Cavendish Place, Eastbourne. (Tel.: 8822/30.) Dunton Road, Head, Worthing (Tel. 8822/2): Whitbread Lane, Northiam. (Tel. 2211): Station Goods Yard, Haywards Heath (Tel. 1750): Crawley Road, Horsham (Tel. 3366): The Hornet, Chichester (Tel. 4181). All grades aggregates, hardcore, clinker, ashes, etc.

WRIGHT, C. AND SONS, LTD., 19 Bristol Gardens, Brighton, 7. (Tel.: Brighton 63357 and 82406.) All-in ballast, washed and crushed shingle, sand, ashes, hardcore, chalk, bricks, etc.

WARWICKSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S. all sizes, coated limestone to B.S. BD2 and 1621 and wet mix; large output; reliable deliveries.

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

DUNNING AND SON, LTD., See Shropshire.)

HALFEN AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Kingston. (Tel. 11.) (See Herefordshire.)

WILTSHIRE

COKE, T. F. (CHELTENHAM), LTD., 267 Gloucester Road, Cheltenham. (Tel. 4717/4874.) (See Gloucester.)

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

FLOYD AGAR AND CO., LTD., Sherston, Malmesbury, Wilts. (Tel.: Sherston 237.) Finest quality Cotswold building stone and walling stones for sale, also hardcore and quarry waste for road making. Delivered or ex quarry at keen prices.

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

MOEYS (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, hoggin, topsoil, gravel.

POOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)

TAYMAC, LTD., Wootton Bassett. (Tel. 304.) Pits at Lacock (Tel. 304), Wilts.; Fairford and Poulton, Glos. (Tel.: Fairford 365/6.) Washed crushed and graded aggregates. Washed and screened building sand. Graded clinker media.

WORCESTERSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S. all sizes, coated limestone to B.S. BD2 and 1621 and wet mix; large output; reliable deliveries.

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

DUNNING AND SON, LTD., See Shropshire.)

HALFEN AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Kingston. (Tel. 11.) (See Herefordshire.)

YORKSHIRE

BRAITHWAITE, A. AND CO., LTD., Conyngham Hall, Knaresborough. (Tel.: Knaresborough 2268.) Quarries at Knaresborough (Tel.: Knares 2286) and Great Ayton. (Tel.: Old Cotes 177.) Washed and crushed and graded concrete aggregates to B.S. Specification. Output 2,000 tons daily. Ready-mixed mortar and concrete also available.

DENNIFER, ALAN S., LTD., Kiveton Park, nr. Sheffield. (Tel.: Kiveton 446/7/8.) Truck-mixed and pre-mixed concrete, washed and crushed gravel, concreting sand, ballast, sand, crushed and graded stone.

GLEN QUARRIES LTD., Central Chambers, Bellahouston, Glasgow. (Tel.: Rothwell 5223.) Crushed and graded stone, concreting sand, building sand, plastering sand and crushed gravel could be collected ex quarry or delivered.

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

NORTH NOTTS. GRAVEL CO., LTD., Retford, Notts. (Tel.: Retford 2219—3 lines.) Concrete aggregates, sand and sandstone, quartzite chippings, building sands and sandstone.

ROBINSONS LTD., Rotherham (Tel.: Rotherham 5223.) Crushed and graded stone, concreting sand, plastering sand and crushed gravel could be collected ex quarry or delivered.

PRESTWICH, WILLIAM, AND SONS, LTD., Dronfield, Derbyshire. (Tel.: 2204—6 lines.) Dry and coated Derbyshire limestone and slag for all purposes and to all specifications. "Haddon" foamed slag blocks.

SALSBURY AND WOOD, LTD., Matlock. (Tel. 272/273.) (For details, see Derbyshire.)

STANLEY FERRY GRAVEL CO., LTD., 1, Stanley Square, Leeds, 1. (Tel.: Leeds 26361.) Washed, crushed and natural graded sand and gravel. Supplies to specification, large daily production. Centre of Yorks. West Riding market. Pit: Wakefield.

WELBECK SAND AND GRAVEL CO., LTD., Parkhill, Wakefield. (Tel.: Wakefield 4445.) Washed sand and gravel.

WEST RIDING GRAVEL CO., LTD., Norwich Union Building, City Square, Leeds, 1. (Tel.: Leeds 26361.) Washed, crushed and natural graded sand and gravel. Produces washed grit and soft sand. All aggregates to specification. Competitive Yorks. West Riding to Lancs. border. Pit: Wakefield.

X.L. GRANITE (INGLETON), LTD., Head Office: Clapham, via Lancaster. (Tel.: Clapham 318/1.) Works Tel.: Ingleton 231. All sizes and gradings of Ingleton granite aggregate.

SUBSCRIPTION ORDER FORM

To THE CONTRACT JOURNAL CO., LTD.,
32 SOUTHWARK BRIDGE ROAD, LONDON, S.E.1

Please forward "THE CONTRACT JOURNAL" each week for which
I/we enclose £.....

Name.....

(BLOCK LETTERS)

Full postal address.....

(BLOCK LETTERS)

Occupation/Business.....

(For Readership Classification Purposes Only)

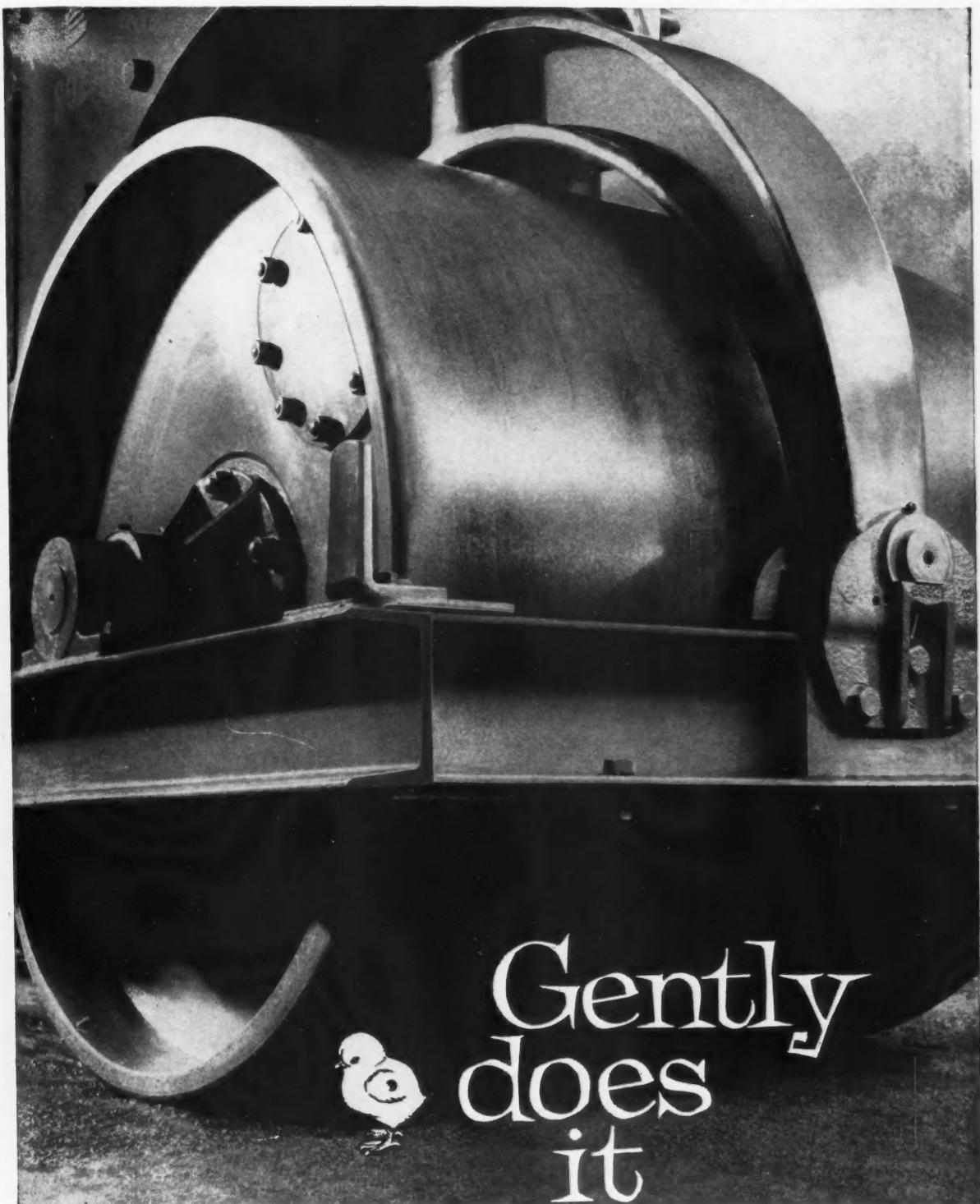
4231

THE INDEX TO DISPLAYED ADVERTISEMENTS WILL BE FOUND ON PAGE 424

London: Printed and published by the Proprietors, The Contract Journal Company, Ltd., 32 Southwark Bridge Road, S.E.1.
Thursday, July 28, 1960. Registered at the General Post Office as a newspaper.

July 28 1960

THE CONTRACT JOURNAL



Gently
does
it

WITH THE
HYDROSTATIC
HIGHWAYMAN

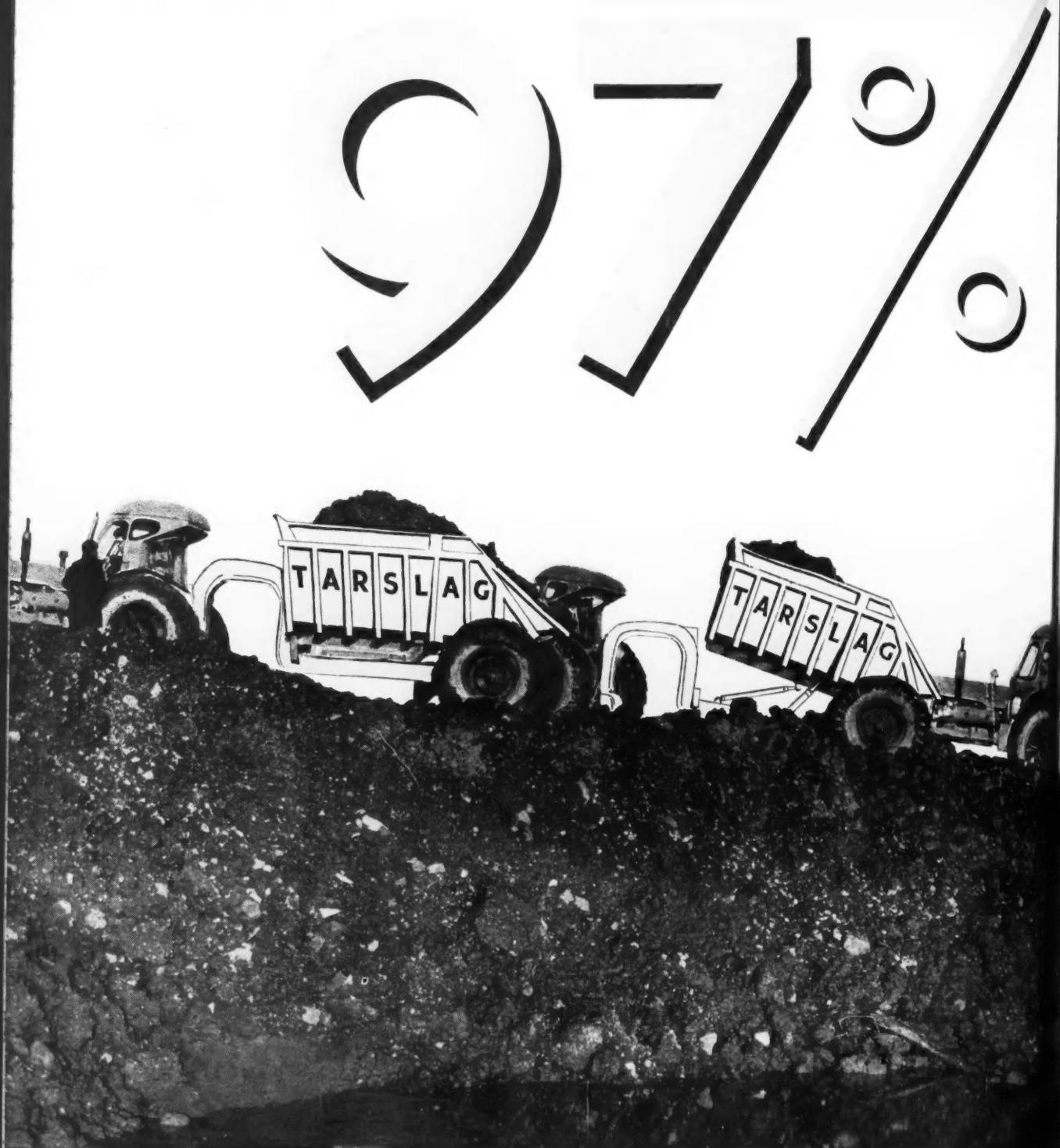
Never before has a road roller been so precisely controlled. A single lever selects a range of infinitely variable speeds from an almost imperceptible crawl to 5 m.p.h. — in both directions. No clutch, no gear changing, just smooth shockless drive and safe pinpoint control on all gradients. The Road-Marshall Highwayman with Dowty Hydrostatic Transmission is typical of the forward thinking at Marshall's, thinking that provides the rollers for tomorrow's highways today.

35 CWT TO 17 TONS — FOR EVERY PURPOSE

ROAD - MARSHALL



MARSHALL SONS & COMPANY LIMITED, GAINSBOROUGH, LINCOLNSHIRE



"The Shawnee-Poole go on working when everything is bogged down" (Les Haynes, Plant Engineer of Tarslag Ltd.)

Since May 1959 when the Shawnee-Poole went to work on this contract at the new steel works in West Hartlepool, they have provided an overall availability of 97% and have continued to operate during some of the worst conditions ever experienced, even when other forms of transport were completely bogged down. They have already moved more than 250,000 cubic yards of muck varying from wet clay to sand and overburden. The Shawnee-Poole have been operating on this site on gradients up to 1 in 5 and under the worst conditions have given better availability and less down-time than any other equipment. The Shawnee-Poole System, with the shortest turning circle of any equipment of its kind, is the world's simplest and most economical method of hauling earth.

Let us show you by means of a Work-Study on your site.



availability

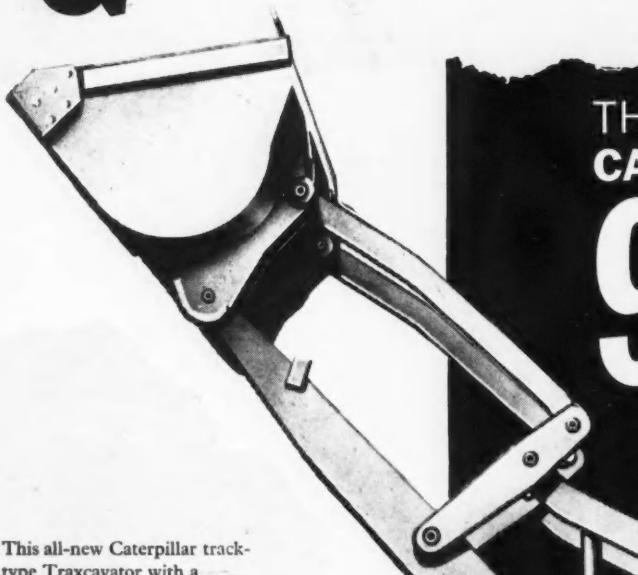


Shawnee
Poole

System of
MOBILITY AND
ECONOMY
IN EARTHMOVING
HAULAGE

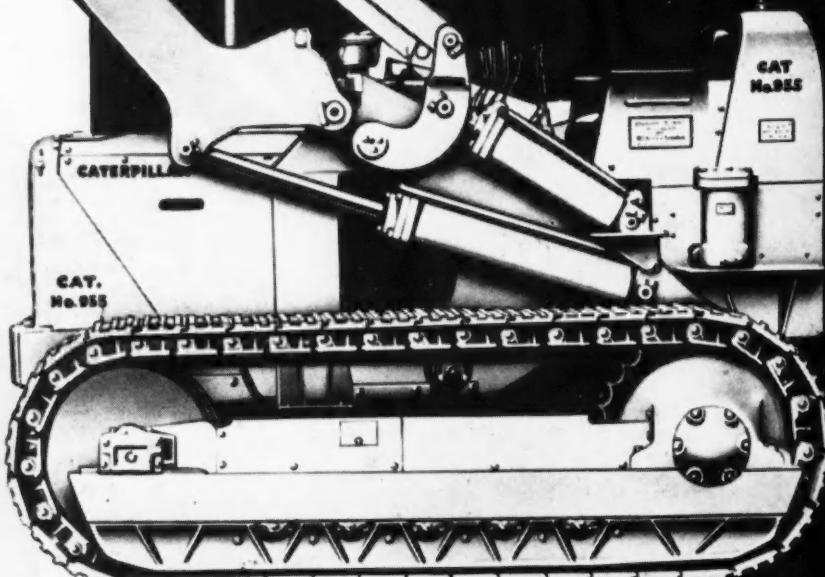
Greater

power...
ease of operation...
hydraulic efficiency...
strength & serviceability



THE ALL-NEW BRITISH-BUILT
CATERPILLAR
955F
TRAXCAVATOR

-cuts production time
-cuts operating costs



This all-new Caterpillar track-type Traxcavator with a 1½ cu. yd. bucket incorporates many new features in addition to those already acclaimed by users of earlier Traxcavator models . . . big, new features that put the 955F in a class of its own for speedy, profitable completion of jobs—time and time again.

GREATER POWER—
for your toughest assignment, from an all-new 70 HP Caterpillar Diesel Engine.

GREATER EASE OF OPERATION—
conveniently located controls . . . better visibility . . . in-seat starting . . . forward-reverse lever, for easy operating and fast cycle times.

GREATER HYDRAULIC EFFICIENCY—
an all-new, faster-acting hydraulic system means quicker loads.

GREATER STRENGTH & SERVICEABILITY—
from a heavy duty undercarriage, strong track components and increased stability. Lifetime-lubricated rollers and idlers need no grease or lubrication.

CATERPILLAR

Caterpillar, Cat and Traxcavator are Registered Trademarks of Caterpillar Tractor Co.

The Power for
Greater Production

CATERPILLAR TRACTOR CO. LTD.
Registered User of Trademarks Caterpillar, Cat and Traxcavator
Tractors • Earthmoving Equipment • Engines • Parts
GLASGOW • LEICESTER • NEWCASTLE • LONDON

T